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STRUCTURE FILE UPDATES: 9 JUN 2002 HIGHEST RN 427875-85-2 DICTIONARY FILE UPDATES: 9 JUN 2002 HIGHEST RN 427875-85-2

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d 185 ide can tot

L85 ANSWER 1 OF 8 REGISTRY COPYRIGHT 2002 ACS

RN 178408-50-9 REGISTRY

CN Phosphoric acid, silver(1+) zirconium(4+) salt, mixt. with 2-(2-ethylhexyl)-3(2H)-isothiazolone (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 3(2H)-Isothiazolone, 2-(2-ethylhexyl)-, mixt. contg. (9CI)

MF C11 H19 N O S . Ag . x H3 O4 P . x Zr

CI MXS

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

CM 1

CRN 41286-37-7 (7664-38-2) CMF Ag . x H3 O4 P . x Zr

●x Ag(I)

●x Zr(IV)

Jan Delaval Reference Librarian Biotechnology & Chemical Library CM1 1E07 – 703-308-4498 jan.delaval@uspto.gov

CM 2

CRN 26530-15-4 CMF C11 H19 N O S 136:379227

5:

REFERENCE

```
REFERENCE
                136:379208
            6:
                136:379201
REFERENCE
            7:
REFERENCE
            8:
                136:379163
                136:379149
REFERENCE
            9.
                136:379102
REFERENCE
           10:
=> d 187 ide can tot
L87 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2002 ACS
RN
     82657-04-3 REGISTRY
     Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propenyl]-
CN
     2,2-dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester, (1R,3R)-rel-
     (9CI)
           (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-
     dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester,
     [1.alpha., 3.alpha.(Z)] - (.+-.) -
OTHER NAMES:
CN
     Bifenthrin
CN
     Bifenthrine
CN
     Biflex
     Biflex FT
CN
CN
     Biphenate
CN
     Biphenthrin
CN
     Biphentrin
CN
     Brigade
CN
     Brigade 10WP
CN
     Brigata Flo
CN
     Capture
CN
     Capture (pesticide)
CN
     Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-
     dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester,
     [1.alpha., 3.alpha.(Z)]-
     FMC 54800
CN
CN
     Talstar
FS
     STEREOSEARCH
     92880-79-0, 107497-60-9, 107538-32-9
DR
MF
     C23 H22 C1 F3 O2
CI
     COM
                  AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CABA,
LC
     STN Files:
       CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM,
       HSDB*, IFICDB, IFIUDB, MEDLINE, MRCK*, NIOSHTIC, PIRA, PROMT, RTECS*,
       TOXCENTER, USPATFULL
         (*File contains numerically searchable property data)
```

Relative stereochemistry. Double bond geometry as shown.

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\* 548 REFERENCES IN FILE CA (1967 TO DATE) 16 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 549 REFERENCES IN FILE CAPLUS (1967 TO DATE) REFERENCE 1: 136:368642 REFERENCE 2: 136:365293 REFERENCE 3. 136:359181 136:354341 REFERENCE 4: 136:351654 REFERENCE 5: 136:320814 REFERENCE 6: REFERENCE 7: 136:305548 136:305514 REFERENCE 8: REFERENCE 9: 136:274825 REFERENCE 10: 136:274698 L87 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2002 ACS RN 10453-86-8 REGISTRY Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, CN [5-(phenylmethyl)-3-furanyl]methyl ester (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES: 3-Furanmethanol, 5-benzyl-, 2,2-dimethyl-3-(2methylpropenyl)cyclopropanecarboxylate (8CI) Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methylpropenyl)-, CN (5-benzyl-3-furyl)methyl ester (8CI) OTHER NAMES: (5-Benzyl-3-furyl)methyl 2,2-dimethyl-3-(2-methylpropenyl)cyclopropanecarb CNoxylate CN (5-Benzyl-3-furyl) methyl chrysanthemate (5-Benzyl-3-furyl)methyl-DL-cis, trans-chrysanthemate CN 5-Benzyl-3-furylmethyl (.+-.)-cis-trans-chrysanthemate CN CN 5-Benzylfurfuryl chrysanthemate CN ARI-B Chrysron CN CN Crossfire dl-cis, trans-[(5-Benzyl-3-furyl)methyl]chrysanthemumate CN CN Enforcer NIA 17370 CN NRDC 104 CN CN Penick 1382 CN Penncapthrin CN Pyresthrin CN Resmethrin SBP 1382 CN CN Seco 3D CONCORD FS 24004-07-7 DR C22 H26 O3 ΜF CI COM AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, LC STN Files:

BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST,

CIN, CSCHEM, DDFU, DRUGU, EMBASE, HSDB\*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, ULIDAT, USPATFULL

(\*File contains numerically searchable property data)
Other Sources: DSL\*\*, EINECS\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

615 REFERENCES IN FILE CA (1967 TO DATE)

18 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

617 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:336508

REFERENCE 2: 136:305548

REFERENCE 3: 136:290531

REFERENCE 4: 136:274825

REFERENCE 5: 136:228375

REFERENCE 6: 136:162742

REFERENCE 7: 136:49745

REFERENCE 8: 136:33284

REFERENCE 9: 136:33222

REFERENCE 10: 136:17687

### => d his

(FILE 'HCAPLUS' ENTERED AT 08:09:51 ON 11 JUN 2002)

DEL HIS

E GB98-18778/AP, PRN

L1 1 S E4

E WO99-GB2796/AP, PRN

L2 1 S E3, E4

L3 1 S L1, L2

E CROSFIELD/PA,CS

L4 227 S E3-E60

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E ALDCROFT D/AU
L5
             46 S E3-E5
                E JONES H/AU
L6
           1282 S E3-E70
                E JONES HELEN/AU
             65 S E3-E14
L7
                E HELEN J/AU
                E DAFYDD T/AU
                E TURNER D/AU
L8
            712 S E3-E27
                E EDGE M/AU
L9
            202 S E3-E5, E12-E16
                E ROBINSON J/AU
L10
           1815 S E3-E66
                E ROBINSON JULIE/AU
L11
             25 S E3-E9
                E SEAL K/AU
L12
             46 S E3-E7, E9-E12
L13
           5707 S ?ISOTHIAZOL?
              6 S L13 AND L4-L12
L14
     FILE 'REGISTRY' ENTERED AT 08:16:43 ON 11 JUN 2002
L15
              3 S 26530-20-1 OR 2682-20-4 OR 26172-55-4
L16
            460 S (26530-20-1 OR 2682-20-4 OR 26172-55-4)/CRN
L17
           1758 S 16.171.7/RID
L18
           1295 S L17 NOT L15, L16
     FILE 'HCAPLUS' ENTERED AT 08:18:16 ON 11 JUN 2002
L19
           1003 S L15
L20
            248 S KATHON CG
            459 S KATHON
L21
            621 S L16
L22
L23
            730 S L18
L24
           6395 S L13, L19-L23
     FILE 'REGISTRY' ENTERED AT 08:20:57 ON 11 JUN 2002
L25
              1 S 1003-07-2
     FILE 'HCAPLUS' ENTERED AT 08:21:07 ON 11 JUN 2002
L26
            276 S L25
L27
           6403 S L24, L26
L28
              6 S L4-L12 AND L27
L29
              6 S L14, L28
L30
              5 S L29 NOT EMPHYSEMA
L31
             25 S L27 AND ?ZEOLIT?
L32
             82 S L27 AND SILICA
L33
             26 S L27 AND (SIO2 OR SILICON()(DIOXIDE OR OXIDE))
L34
            115 S L31-L33
     FILE 'REGISTRY' ENTERED AT 08:23:56 ON 11 JUN 2002
L35
              1 S SILICA/CN
     FILE 'HCAPLUS' ENTERED AT 08:24:06 ON 11 JUN 2002
             44 S L27 AND L35
L36
            119 S L34, L36
L37
              4 S L30 AND L37
L38
L39
              5 S L30, L38
                E ZEOLITE/CT
                E E177+ALL
L40
          47893 S E1
                E E2+ALL
           8253 S E209+NT
L41
          52071 S E7+NT
L42
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L43
             23 S L27 AND L40-L42
                E E434+ALL
              2 S E4 AND L27
L44
              2 S E4+NT AND L27
L45
                E E16+ALL
              3 S L27 AND E3+NT
L46
                E E2+ALL
              2 S L27 AND E8+NT
L47
              5 S L27 AND E2+NT
L48
            123 S L37, L43-L48
L49
L50
              4 S L4-L12 AND L49
                E ADSORPTION/CT
                E E3+ALL
                E E4+ALL
              9 S E5, E4+NT AND L27
L51
            130 S L49, L51
L52
               4 S L4-L12 AND L52
L53
L54
              5 S L39, L53
                E BIOCIDE/CT
                E E4+ALL
L55
         248259 S E2+NT
           8427 S ?BIOCID?
L56
           1007 S L55, L56 AND L40-L42
L57
L58
           5636 S L55, L56 AND (?ZEOLIT? OR SILICA OR SIO2 OR SILICON() (DIOXIDE
L59
           5636 S L57, L58
            101 S L52, L59 AND PAINT
L60
L61
            879 S L52, L59 AND COAT?
L62
             11 S L52, L59 AND (LACQUER? OR LAQUER?)
L63
            306 S L52, L59 AND (SEALANT OR TILE OR TILING OR GROUT OR GROUTING O
            117 S L60-L63 AND (?PORE? OR ?POROUS? OR ?POROS?)
L64
           2943 S L52, L59 AND (COAT? OR CEMENT? OR AGRO?) /SC, SX
L65
            241 S L65 AND (?PORE? OR ?POROUS? OR ?POROS?)
L66
            224 S L64, L66 AND (PY<=1998 OR PRY<=1998 OR AY<=1998)
L67
L68
              7 S L67 AND L27
            300 S L52, L59 AND L27
L69
            249 S L69 AND (PY<=1998 OR PRY<=1998 OR AY<=1998)
L70
L71
            136 S L70 AND L60-L65
             73 S 5/SC AND L71
L72
             24 S 5/SX AND L71
L73
             97 S L72, L73
L74
              6 S L74 AND L40-L42
L75
              6 S L74 AND ?ZEOLIT?
L76
             15 S L54, L68, L75, L76
L77
             88 S L74 NOT L77
L78
             1 S L78 AND GRANUL?
L79
             16 S L77, L79
L80
              3 S L27 AND Y(L)ZEOLIT?
L81
              1 S L27 AND DEALUMIN? (L) ZEOLIT?
L82
             17 S L80-L82
L83
                SEL HIT RN
     FILE 'REGISTRY' ENTERED AT 08:51:24 ON 11 JUN 2002
             11 S E1-E13
L84
L85
              8 S L84 AND L15-L18, L25
L86
              1 S L84 AND L35
L87
              2 S L84 NOT L85, L86
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FILE 'REGISTRY' ENTERED AT 08:52:28 ON 11 JUN 2002

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=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 08:52:56 ON 11 JUN 2002

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FILE COVERS 1907 - 11 Jun 2002 VOL 136 ISS 24 FILE LAST UPDATED: 9 Jun 2002 (20020609/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

#### => d all tot 183

- L83 ANSWER 1 OF 17 HCAPLUS COPYRIGHT 2002 ACS
- AN 2001:931199 HCAPLUS
- DN 136:58474
- TI An optimized blend of **isothiazolinones** can be use as an effective cosmetic preservative to protect against microorganisms
- AU Seal, Kenneth J.; Alexander, Bruce
- CS Cosmetics Div. of Kent, UK-based Thor Group Manage. Ltd., UK
- SO Global Cosmetic Industry (2001), 169(6), 24, 26-30 CODEN: GCINFU; ISSN: 1523-9470
- PB Advanstar Communications, Inc.
- DT Journal; General Review
- LA English
- CC 62-0 (Essential Oils and Cosmetics)
- AB A review with refs. on a mixt. of chloromethylisothiazolinone and methylisothiazolinone as preservatives in cosmetics.
- ST review isothiazolinone cosmetic preservative microorganism
- IT Cosmetics

Microorganism

Preservatives

(optimized blend of **isothiazolinones** can be use as effective cosmetic preservative to protect against microorganisms)

IT 1003-07-2D, Isothiazolinone, derivs.

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (optimized blend of isothiazolinones can be use as effective cosmetic preservative to protect against microorganisms)

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

- (1) Basketter, D; Contact Dermatitis 1999, V40(3), P150 HCAPLUS
- (2) Brozel, V; Journal of Applied Bacteriology 1994, V76(6), P576 HCAPLUS
- (3) Bruze, M; Contact Dermatitis 1987, V16(4), P183 HCAPLUS
- (4) Bruze, M; Derm Beruf Umwelt 1987, V35(5), P165 HCAPLUS
- (5) Chapman, J; International Biodeterioration & Biodegradation 1998, V41, P241 HCAPLUS
- (6) Collier, P; Journal of Applied Bacteriology 1990, V69, P569 HCAPLUS
- (7) Collier, P; Journal of Applied Bacteriology 1990, V69, P578 HCAPLUS
- (8) Diehl, M; International Biodeterioration and Biodegradation 1999, V44, P191 HCAPLUS

- (9) Geier, J; Contact Dermatitis 1996, V34(2), P148 MEDLINE
- (10) Jacobsen, A; Chimica Oggi 2000
- (11) Kull, F; Applied Microbiology 1961, V9, P538 HCAPLUS
- (12) Paulus, W; Microbiocides for the Protection of Materials 1993
- (13) Robinson, M; Contact Dermatitis 2000, V42(5), P251 MEDLINE
- (14) Ross, J; Contact Dermatitis 2000, V42(Supp 2), P32
- (15) Steinberg, D; Cosmetics & Toiletries 2000, V115(11), P59 (16) Stejskal, V; Invest Dermatol 1990, V94(6), P798 HCAPLUS
- (17) Winder, C; Journal of Applied Microbiology 2000, V89(2), P289 HCAPLUS
- L83 ANSWER 2 OF 17 HCAPLUS COPYRIGHT 2002 ACS
- 2001:354884 HCAPLUS AN
- DN 135:97774
- TΙ The retention of heterocyclics by siliceous frameworks. Part I, The role of the heterocyclic
- Edge, M.; Turner, D.; Liauw, C. M.; Robinson, ΑU J.; Allen, N. S.
- Department of Chemistry and Materials, The Manchester Metropolitan CS University, Manchester, M1 5GD, UK
- Journal of Materials Science (2001), 36(6), 1443-1450 SO CODEN: JMTSAS; ISSN: 0022-2461
- Kluwer Academic Publishers PΒ
- DT Journal
- LA English
- CC 66-3 (Surface Chemistry and Colloids) Section cross-reference(s): 67
- Flow microcalorimetry was used to probe acid-base interactions between AB five-membered-ring heterocyclics and thermally pre-treated, porous The adsorbates (1-methylpyrrolidin-2-one, pyridine, pyrrolidine, pyrrole, 2-methylthiophene, 2-octyl-4-isothiazolin -3-one, 4,5-dichloro-2-octyl-4-isothiazolin-3-one and 2-cyclopentenone), varied in basicity, polarity and .pi.-character. The amts. of the adsorbates retained by the silica were detd., along with enthalpy of adsorption (ranging from -5.5 kJ mol-1 to -57.8 kJ mol-1) and enthalpy of desorption (ranging from  $5.6\ kJ\ mol-1$  to  $26.1\ kJ\ mol-1$ ). For the majority of the adsorbates the enthalpy of adsorption is consistent with hydrogen bonding to isolated silanols. Although increasing basicity enhanced the adsorption enthalpy and hence the strength of assocns., desorption was inhibited when a carbonyl, or unsatd. carbonyl, group was adjacent to the active basic center. Bulky electron-withdrawing agents (chlorine atoms) substituted at the double bond of the unsatd. carbonyl reduced the adsorption considerably. This was attributed to steric hindrance restricting the proximity of the basic groups with the active silanol sites.
- adsorbed heterocyclic compd interaction porous silica
- IT Acidity

# Adsorption

Adsorption enthalpy

Basicity

### Desorption

Hydrogen bond

Porous materials

Proximity effect

Reaction enthalpy

Reaction kinetics

(the retention of heterocyclics by siliceous frameworks, the role of the heterocyclic in interaction with porous silica)

Heterocyclic compounds IT

RL: RCT (Reactant); RACT (Reactant or reagent)

(the retention of heterocyclics by siliceous frameworks, the role of the heterocyclic in interaction with porous silica)

109-97-7, Pyrrole 110-86-1, Pyridine, reactions 123-75-1, Pyrrolidine, IT554-14-3, 2-Methylthiophene 872-50-4, 1-Methylpyrrolidin-2reactions

930-30-3, 2-Cyclopentenone 7631-86-9, one, reactions Silica, reactions 26530-20-1, 2-Octyl-4isothiazolin-3-one 64359-81-5, 4,5-Dichloro-2-octyl-4isothiazolin-3-one

RL: RCT (Reactant); RACT (Reactant or reagent)

(the retention of heterocyclics by siliceous frameworks, the role of the heterocyclic in interaction with porous silica)

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD RF.

- (1) Ashton, D; Controlled Interfaces in Polymeric Materials 1990
- (2) Bastik, J; Acad Sci 1965, V247, P203
- (3) Curthoys, G; J Colloid Interface Sci 1974, V48, P58 HCAPLUS

- (4) Davydov, V; Russ J Phys Chem 1964, V38, P1108
  (5) Drago, R; J Am Chem Soc 1965, V87, P3571 HCAPLUS
  (6) Drago, R; J Am Chem Soc 1971, V93(23), P6014 HCAPLUS
- (7) Edge, M; Proceedings of the 'Silica'98' Conference 1998
- (8) Giles, C; J Chem Soc 1960, P3973 HCAPLUS
- (9) Hertl, W; J Phys Chem 1968, V72, P4676 HCAPLUS
- (10) Iler, R; The Chemistry of Silica 1979
- (11) Kiselev, A; Kollodn Zh 1936, V2, P17 HCAPLUS (12) Morrow, B; J Phys Chem 1973, V77, P1465 HCAPLUS
- (13) Proctor, K; PhD thesis, Colarado State University 1989 (14) Zhuravlev, L; Langmuir 1987, V3, P316 HCAPLUS
- (15) Zhuravlev, L; Pure Appl Chem 1989, V61, P1969 HCAPLUS
- L83 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2002 ACS
- ΑN 2001:289543 HCAPLUS
- DN 135:290184
- The enhanced performance of biocidal additives in paints and coatings TΙ
- Edge, M.; Allen, N. S.; Turner, D.; Robinson, AU J.; Seal, Ken
- Centre for Materials Science Research, Dept. of Chemistry and Materials, CS Manchester Metropolitan University, Manchester, M1 5GD, UK
- International Conference in Organic Coatings: Waterborne, High Solids, SO Powder Coatings, Proceedings, 26th, Athens, Greece, July 3-7, 2000 (2000), 39-50 Publisher: Institute of Materials Science of New Paltz, New Paltz, N. Y.
  - CODEN: 69BFBO
- DT Conference
- LA English
- CC 42-5 (Coatings, Inks, and Related Products)
- The addn. of film biocides to coatings is necessary to prevent microbial AB spoilage. The biocides must be mobile so that they can migrate to the coating interface and across the cell membrane to destroy microbes. Unfortunately, concurrent losses of biocide by aq. extn. require the addn. of relatively high initial levels. This presents problems since biocides are fundamentally toxic and at such increased levels they pose a risk to the surrounding ecosystem. Legislative directives currently in place aim to reduce the amt. of biocide released to the environment. This study has shown that typical coating biocides can be encapsulated within modified silica frameworks. These porous frameworks offer a means to inhibit the aq. extn. of the biocide. In such combinations the biocides retain their anti-microbial properties, while controlled delivery facilitates a dynamic equil. to maintain a min. inhibitory concn. at the coating interface, over an extended time period. There is evidence that biocide housed in such frameworks has a longer effective activity for a given initial concn., since it is to some extent protected from the usual environmental degrdn. processes.
- biocide additive paint coating
- Zeolites (synthetic), biological studies ΙT RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(biocide; enhanced performance of biocidal additives in paints and

```
coatings)
ΙT
     Biocides
     Coating materials
     Paints
        (enhanced performance of biocidal additives in paints and coatings)
    7631-86-9, Silica, biological studies 26530-20-1
ΙT
       2-Octyl-4-isothiazolin-3-one
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
   · (Uses)
        (biocide; enhanced performance of biocidal additives in paints and
        coatings)
              THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
       14
RF.
(1) Anon; UK Patent Application No PCT/GB 99/02796
(2) Ashton, D; Controlled Interfaces in Polymeric Materials 1990
(3) Curthoys, G; J Colloid Interface Sci 1974, V48, P58 HCAPLUS
(4) Edge, M; J Mat Sci, in press 2000
(5) Gates, B; Catalytic Chemistry 1992
(6) Gillatt, J; Polymers Paint Colour J 1993
(7) Iler, R; The Chemistry of Silica 1979
(8) Kazeminski, S; J Agric Food Chem 1975, V23, P1060
(9) Kazeminski, S; J Agric Food Chem 1975, V23, P1068
(10) Pfeifer, H; Zeolites 1985, V5, P274 HCAPLUS
(11) Ward, J; J Catal 1968, V11, P251 HCAPLUS
(12) Westervelt, R; Chemical Week 1994, P30
(13) Zhuravlev, L; Langmuir 1987, V3, P316 HCAPLUS
(14) Zhuravlev, L; Pure Applied Chem 1989, V61, P1969 HCAPLUS
L83 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN
     2001:266999 HCAPLUS
DN
     134:322001
     The enhanced performance of preservatives for the protection of paints and
ΤI
     coatings using a novel encapsulation process
     Seal, K. J.; Edge, M.; Allen, N. S.; Turner,
ΑU
     D.; Robinson, J.
     Dep. Chemistry and Materials, Manchester Metropolitan Univ., UK
CS
     Faerg och Lack Scandinavia (2001), 47(1), 5-6, 8-10
SO
     CODEN: FLSCDT; ISSN: 0106-7559
PΒ
     Peter Graah Bladforlag
DT
     Journal
LA
     English
CC
     5-2 (Agrochemical Bioregulators)
     Section cross-reference(s): 42
     Biocides are environmentally toxic, and the EU is committed to a redn. in
AB
     their use. A strategy to control the release of biocides is therefore
     required if the protection of paints continues to be available both to the
     industry and to the customer. The article describes one approach to
     controlling the release of biocides by encapsulation in an inert inorg.
     framework.
     biocide encapsulated silica zeolite paint coating
ST
TT
     Y zeolites
     RL: MOA (Modifier or additive use); USES (Uses)
        (controlled-release biocides for paints and coatings encapsulated in)
IT
     Biocides
     Coating materials
     Encapsulation
     Paints
        (encapsulated controlled-release biocides for paints and coatings)
ΙT
     7631-86-9, Silica, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (controlled-release biocides for paints and coatings encapsulated in)
     2682-20-4, 2-Methyl-4-isothiazolin-3-one
IT
     26172-55-4, 5-Chloro-2-methyl-4-isothiazolin-3-one
```

**26530-20-1**, 2-Octyl-4-isothiazolin-3-one 64359-81-5, 4,5-Dichloro-2-Octyl-4-isothiazolin-3-one RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (encapsulated controlled-release biocides for paints and coatings) RE.CNT THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD RE (1) Anon; GB 9902796 (2) Ashton, D; Controlled Interfaces in Polymeric Materials (3) Edge, M; J Mat Sci accepted for publication 2000 (4) Gates, B; Catalytic Chemistry 1992 (5) Gillatt, J; Polymers Paint Colour J 1993 (6) Iler, R; The Chemistry of Silica 1979. (7) Kazeminski, S; Agric Food Chem 1975, V23, P1060 (8) Kazeminski, S; J Agric Food Chem 1975, V23, P1068 (9) Pfeifer, H; Zeolites 1985, V5, P274 HCAPLUS (10) Ward, J; J Catal 1968, V11, P251 HCAPLUS (11) Zhuravlev, L; Langmuir 1987, V3, P316 HCAPLUS (12) Zhuravlev, L; Pure Applied Chem 1969, V61 L83 ANSWER 5 OF 17 HCAPLUS COPYRIGHT 2002 ACS AN 2001:57130 HCAPLUS DN 134:135620 ΤI Manufacture of waterproof reinforced cementitious structural panels ΙN Murphy, Patrick B.; Wypych, George PΑ Smartboard Building Products Inc., Can. SO U.S., 10 pp. CODEN: USXXAM DT Patent LA English IC ICM C04B014-38 ICS B32B005-02; B32B005-16; B32B005-24; B32B013-02 NCL 106711000 58-4 (Cement, Concrete, and Related Building Materials) Section cross-reference(s): 38 FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ------US 6176920 B1 20010123 19980612 <--US 1998-96175 PΙ A cementitious structural panel, its method of manuf. and waterproofing AΒ coating compns. are described. The method involves encapsulating a top and bottom layer of porous reinforcing material, such as PVC-coated fiberglass, with a cementitious mixt. by vibration. The structural panel may be coated with a layer of waterproof material. Thus, 120 kg of aggregate was mixed with 60 kg of Portland cement, 50 mL of air entraining agent, and 60 kg of water for 8 min. The cementitious mixt. was then poured into a 12-mm thick structural panel mold contg. a bottom scrim (porous reinforcing material) before a top scrim was placed and the mold was vibrated for 30 s and subsequently cured at 40.degree.C (90% humidity) for 8 h. A coating mixt. was made from 500 g of emulsion PVC, 350 g of di(2-ethylhexyl) phthalate, 16 g of calcium-zinc stabilizer, and 4 g of barium metaborate monohydrate to form a pseudoplastic paste. The top surface of the panel was then kiss-coated with the paste and the material heated in oven for 2 min at 180.degree.C. Water droplets deposited on the surface of the coated panel did not wet significantly the panels and water absorption was only 1.7% after 24 h. reinforced cementitious structural panel waterproof coating; ST  $\begin{tabular}{ll} \textbf{vibration encapsulation porous} & \textbf{sheet reinforcement polymer} \\ \end{tabular}$ coated cementitious panel; waterproofing polymer coating reinforced cement panel Construction materials IT

(boards, reinforced cement; manuf. of waterproof reinforced

cementitious structural panels by vibration encapsulation of porous sheets and coating with waterproofing layers)
Fatty acids, uses
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)

(calcium salts, stabilizing agents; manuf. of waterproof reinforced cementitious structural panels by vibration encapsulation of porous sheets and coating with waterproofing layers)

IT Stabilizing agents

(calcium-zinc, in coatings; manuf. of waterproof reinforced cementitious structural panels by vibration encapsulation of porous sheets and coating with waterproofing layers)

IT Composites

ΙT

(cement; manuf. of waterproof reinforced cementitious structural panels by vibration encapsulation of porous sheets and coating with waterproofing layers)

IT Acrylic polymers, processes

Polymers, processes

Polyurethanes, processes

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(coatings; manuf. of waterproof reinforced cementitious structural panels by vibration encapsulation of porous sheets and coating with waterproofing layers)

IT Biocides

(in **coating**; manuf. of waterproof reinforced cementitious structural panels by vibration encapsulation of **porous** sheets and **coating** with waterproofing layers)

IT Fillers

Plasticizers

(in **coatings**; manuf. of waterproof reinforced cementitious structural panels by vibration encapsulation of **porous** sheets and **coating** with waterproofing layers)

IT Aggregates

Coating process

Molding

Waterproofing

Waterproofing agents

(manuf. of waterproof reinforced cementitious structural panels by vibration encapsulation of **porous** sheets and **coating** with waterproofing layers)

IT Glass fibers, processes

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(mesh reinforcement; manuf. of waterproof reinforced cementitious structural panels by vibration encapsulation of **porous** sheets and **coating** with waterproofing layers)

IT Cement (construction material)

(portland; manuf. of waterproof reinforced cementitious structural panels by vibration encapsulation of **porous** sheets and **coating** with waterproofing layers)

IT **Porous** materials

(reinforcing sheets; manuf. of waterproof reinforced cementitious structural panels by vibration encapsulation of **porous** sheets and **coating** with waterproofing layers)

IT Coating materials

(water-resistant; manuf. of waterproof reinforced cementitious structural panels by vibration encapsulation of **porous** sheets and **coating** with waterproofing layers)

IT Fatty acids, uses

RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)

(zinc salts, stabilizing agents; manuf. of waterproof reinforced

cementitious structural panels by vibration encapsulation of porous sheets and coating with waterproofing layers) ΙT 77-58-7, Dibutyl tin dilaurate RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (catalyst, in panel coating; manuf. of waterproof reinforced cementitious structural panels by vibration encapsulation of porous sheets and coating with waterproofing layers) ΙT 9002-86-2, PVC RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses) (coatings; manuf. of waterproof reinforced cementitious structural panels by vibration encapsulation of porous sheets and coating with waterproofing layers) IT 321852-96-4 RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (coatings; manuf. of waterproof reinforced cementitious structural panels by vibration encapsulation of porous sheets and coating with waterproofing layers) 107-21-1, Ethylene glycol, processes TΤ 101-68-8, MDI 117 - 81 - 7471-34-1, Calcium carbonate, processes Di(2-ethylhexyl) phthalate 7646-85-7, Zinc chloride, 7631-86-9, Silica, processes 9002-93-1, Triton X-405 9004-62-0, Natrosol 250HR processes 9063-51-8, Tamol 850 12794-56-8, Nopco NXZ 13463-67-7, Titania, processes 13845-36-8, Potassium tripolyphosphate 19004-06-9, Boric acid (HBO2), barium salt, monohydrate 26530-20-1, Skane M-8 190857-30-8, Rhoplex 2438 82853-00-7, Pluracol 220 RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (in coating; manuf. of waterproof reinforced cementitious structural panels by vibration encapsulation of porous sheets and coating with waterproofing layers) IT 7664-41-7, Ammonia, processes RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses) (pH adjusting agent; manuf. of waterproof reinforced cementitious structural panels by vibration encapsulation of porous sheets and coating with waterproofing layers) RE.CNT THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD RE (1) Anon; GB 1105623 1968 HCAPLUS (2) Ballard; US 4269628 1981 HCAPLUS (3) Forss; US 4306912 1981 HCAPLUS (4) Gee; US 4242142 1980 HCAPLUS (5) Goff; US 2355966 1944 (6) Jones; US 4373958 1983 HCAPLUS (7) Kalvenes; US 4329178 1982 (8) Kwech; US 4102700 1978 (9) Lehan; US 4868039 1989 (10) Marx; US 1828029 1931 HCAPLUS (11) McAloon; US 4539046 1985 HCAPLUS (12) Miller; US 5350554 1994 (13) Munster; US 4338134 1982 HCAPLUS (14) Peltier; US 4135940 1979 HCAPLUS (15) Proux; US 3051590 1962 (16) Schupack; US 4159361 1979 HCAPLUS (17) Slack; US 4436564 1984 HCAPLUS (18) Sweeney; US 5268226 1993 HCAPLUS (19) Tallard; US 4726713 1988 (20) Webster; US 4018619 1977 HCAPLUS

(21) Wills; US 4407677 1983 HCAPLUS

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ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2002 ACS
L83
     2000:161072 HCAPLUS
ΑN
     132:162393
DN
     Particulate carrier for biocide formulations
ΤÏ
     Aldcroft, Derek; Jones, Helen; Turner, Dafydd
IN
     ; Edge, Michelle; Robinson, Julie; Seal,
     Kenneth
PA
     Crosfield Limited, UK
     PCT Int. Appl., 35 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
     ICM A01N025-08
IC
     ICS C09D005-14
CC
     5-2 (Agrochemical Bioregulators)
FAN.CNT 1
                      KIND DATE
                                           APPLICATION NO.
                                                            DATE
     PATENT NO.
                                          -----
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                      ____
                           _____
                     A1 20000309
                                          WO 1999-GB2796 19990824 <--
     WO 2000011949
PΤ
            AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
             DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
             JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
            MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
             TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
            MD, RU, TJ, TM
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             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     AU 9954383
                     A1
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     BR 9913260
                            20010522
                                          BR 1999-13260
                                                            19990824 <--
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                                           EP 1999-940403
                                                            19990824 <--
     EP 1115282
                      A1
                            20010718
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
PRAI GB 1998-18778
                            19980828
                                     <--
                     Α
                      W
                            19990824
     WO 1999-GB2796
     A particulate porous inorg. carrier material is impregnated with
AB
     a biocidal formulation and serves as a vehicle for introduction
     of the biocide into a liq.-based media, such as a surface
     coating or surface cleaning compns., in order to allow controlled
     release of the biocide to combat bacterial, fungal, algal or
     like growth for an extend period of time. The particulate carrier is
     amorphous silica, Y-zeolite and/or
     dealuminated Y-zeolite. The biocide
     is 2-octyl-4-isothiazolin-3-one or 5-chloro-2-methyl-4-
     isothiazolin-3-one. The invention is esp. suitable for
     paints.
ST
     particulate carrier biocide formulation
IT
     Antibacterial agents
       Biocides
        (particulate carrier for biocide formulations)
IT
     Y zeolites
     RL: MOA (Modifier or additive use); USES (Uses)
        (particulate carrier for biocide formulations)
ΙT
     Paints
        (particulate carrier for biocide formulations in)
     7631-86-9, Silica, uses
IT
     RL: MOA (Modifier or additive use); USES (Uses)
        (amorphous; particulate carrier for biocide formulations)
IT
     26172-55-4, 5-Chloro-2-methyl-4-isothiazolin-3-one
     26530-20-1, 2-Octyl-4-isothiazolin-3-one
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (particulate carrier for biocidal formulations of)
```

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RE.CNT 10
              THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
RF.
(1) Anon; JP 10237716 A 1980 HCAPLUS
(2) Anon; JP 04066505 A2 1992 HCAPLUS
(3) Crossfield Ltd; WO 9531508 A 1995 HCAPLUS
(4) Eastman Kodak Co; EP 0832561 A 1998 HCAPLUS
(5) Imperial Chemical Industries Plc; EP 0457435 A 1991 HCAPLUS
(6) Joseph Crosfield & Sons Ltd; WO 9411302 A 1994 HCAPLUS
(7) Rohm And Haas Co; EP 0112610 A 1984 HCAPLUS
(8) Rohm And Haas Co; EP 0922386 A 1999 HCAPLUS
(9) Rollen, J; WO 9309817 A 1993 HCAPLUS
(10) Unilever Plc; EP 0353075 A 1990 HCAPLUS
L83 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2002 ACS
     1999:392945 HCAPLUS
ΑN
DN
     131:40955
ΤI
     Controlled-release compositions containing agricultural pesticide,
     microbicide or antifouling agent incorporated into metal oxide glass
     Ghosh, Tirthankar; Nungesser, Edwin Hugh
ΙN
PA
     Rohm and Haas Company, USA
SO
     Eur. Pat. Appl., 18 pp.
     CODEN: EPXXDW
DT
     Patent
LA
     English
     ICM A01N025-10
TC
CC
     5-2 (Agrochemical Bioregulators)
     Section cross-reference(s): 42, 57
FAN.CNT 1
                                           APPLICATION NO.
                                                            DATE
     PATENT NO.
                     KIND DATE
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                     A2
     EP 922386
                            19990616
                                           EP 1998-309692
                                                            19981125 <--
PΙ
                     A3 20000126
     EP 922386
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     US 6090399
                           20000718
                                           US 1998-189479
                                                            19981110 <--
                     Α
    AU 9895159
                      A1
                            19990701
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                                                            19981201 <--
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                      Α
                            20000314
                                           BR 1998-5326
                                                            19981209 <--
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                            19990928
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                                                            19981211 <--
     JP 11263702
                            19991027
                                         · CN 1998-123093
                                                            19981211 <--
     CN 1232610
                      Α
PRAI US 1997-69243P
                     Ρ
                            19971211 <--
     Disclosed are controlled-release compns. contg. biol. active compds.
     incorporated into metal oxide glass having a porous matrix which
     is prepd. by polymg. one or more metal alkoxide monomers, optionally in
     the presence of a second metal alkoxide monomer. These compns. may be
     directly incorporated into the locus to be protected or may be applied to
     a structure in a coating. Thus, tetraethoxy orthosilicate and
     methyltriethoxy orthosilicate (mole ratio 4:1), 4,5-dichloro-2-n-octyl-3-
     isothiazolone (5% by wt. of the final product), and water (mole
     ratio of alkoxide monomers to water 1:2) were combined in a flask and
     homogenized by adding methanol or ethanol while stirring; then, 8-10 g of
     0.01N\ \mbox{HCl} per mol of metal alkoxide monomer was added to the reaction
     mixt., which was allowed to polymerize at room temp. for 3-60 days to give
     a solid organometallic oxide glass contg. the biol. active compd.
     cumulative percentages of 4,5-dichloro-2-n-octyl-3-isothiazolone
     released were 5, 30, 41, 50 and 64% by wt. in \bar{0}, 0.5, 2, 31, and 144 h.
     controlled release pesticide metal oxide glass; antifouling
ST
     coating metal oxide glass; microbicide controlled release
     porous glass
ΙT
     Fungicides
        (agrochem.; controlled-release compns. contg. agricultural pesticide,
        microbicide or antifouling agent incorporated into metal oxide glass)
ΙT
     Coating materials
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(antifouling; controlled-release compns. contg. agricultural pesticide,

microbicide or antifouling agent incorporated into metal oxide glass) IT Antibiotics Antimicrobial agents Coating materials Herbicides Insecticides (controlled-release compns. contg. agricultural pesticide, microbicide or antifouling agent incorporated into metal oxide glass) ΤТ Amino acids, biological studies Anilides Heterocyclic compounds Nitriles, biological studies RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (controlled-release compns. contg. agricultural pesticide, microbicide or antifouling agent incorporated into metal oxide glass) Metal alkoxides IT RL: AGR (Agricultural use); BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses) (controlled-release compns. contg. agricultural pesticide, microbicide or antifouling agent incorporated into metal oxide glass) Pesticide formulations ΙT (controlled-release; controlled-release compns. contg. agricultural pesticide, microbicide or antifouling agent incorporated into metal oxide glass) IT Carboxylic acids, biological studies RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (derivs.; controlled-release compns. contg. agricultural pesticide, microbicide or antifouling agent incorporated into metal oxide glass) Antifouling agents ΤТ (marine; controlled-release compns. contg. agricultural pesticide, microbicide or antifouling agent incorporated into metal oxide glass) Glass, biological studies ΤТ RL: AGR (Agricultural use); BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses) (porous; controlled-release compns. contg. agricultural pesticide, microbicide or antifouling agent incorporated into metal oxide glass) 56-38-2, Parathion 56-41-7D, Alanine, acyl TΤ 54-11-5 55-38-9, Fenthion 57-13-6D, Urea, derivs., biological studies 60-51-5, derivs. Dimethoate 63-25-2, Carbaryl 66-22-8D, Uracil, derivs. 83-79-4, 86-50-0, Azinphosmethyl 93-98-1 101-84-8D, Diphenyl ether, Rotenone 115-29-7, Endosulfan 107-49-3, TEPP 115-32-2, Dicofol derivs. 116-06-3, Aldicarb 115-90-2, Fensulfothion 116-01-8, Ethoate-methyl 122-14-5, Fenitrothion 126-75-0, Demeton-S 127-63-9, Diphenyl sulfone 141-66-2, Dicrotophos 290-87-9D, 1,3,5-Triazine, derivs. 298-00-0, 298-02-2, Phorate 301-12-2 315-18-4, Mexacarbate Methyl parathion 333-41-5, Diazinon 463-77-4D, Carbamic acid, derivs., biological studies 563-12-2, Ethion 594-07-0D, Dithiocarbamic acid, 485-31-4, Binapacryl 645-48-7, 1-Phenylthiosemicarbazide 682-80-4, Demephion-O derivs. 867-27-6, Demeton-O-methyl 944-22-9, Fonofos 950-37-8 732-11-6, Phosmet 919-86-8, 950-37-8, Methidathion Demeton-S-methyl 1113-02-6, 1594-56-5 2032-65-7, Methiocarb Omethoate 1563-66-2, Carbofuran 2143-68-2, Methoxyl 2275-23-2, Vamidothion 2310-17-0, Phosalone 2312-35-8, Propargite 2631-37-0, Promecarb 3383-96-8, Temephos 2439-10-3, Dodine 2587-90-8, Demephion-S 2778-04-3, Endothion 2921-88 5598-13-0, Chlorpyrifos methyl 2921-88-2, Chlorpyrifos 6923-22-4, 7786-34-7, Mevinphos 8065-48-3, Demeton 10265-92-6, Monocrotophos Methamidophos 10311-84-9, Dialifor 10453-86-8, Resmethrin 10605-21-7, Carbendazim 13071-79-9, Terbufos 13121-70-5, Cyhexatin 10605-21-7, Carbendazim 13071-79-9, Terbufos 13121-70-5, 13171-21-6, Phosphamidon 13194-48-4, Ethoprop 13356-08-6,

13457-18-6, Pyrazophos

14255-88-0, Fenazaflor

Fenbutatin-oxide

```
15263-53-3, Cartap
                     16752-77-5, Methomyl
                                            18854-01-8, Isoxathion
                                                  23135-22-0, Oxamyl
                        23103-98-2, Pirimicarb
22224-92-6, Fenamiphos
23505-41-1, Pirimiphos-ethyl
                              23564-05-8, Thiophanatemethyl
                                                               24017-47-8.
Triazophos
             24579-73-5, Propamocarb 25154-55-6D, Nitrophenol, derivs.
                         29973-13-5, Ethiofencarb
                                                   30560-19-1, Acephate
25311-71-1, Isofenphos
35367-38-5, Diflubenzuron
                            35554-44-0, Imazalil
                                                   38260-54-7, Etrimfos
                     39515-40-7
                                   41198-08-7, Profenofos
39300-45-3, Dinocap
                                                            42509-80-8,
           51630-58-1, Fenvalerate
                                     52315-07-8, Cypermethrin
Isazophos
                         52918-63-5, Deltamethrin
52645-53-1, Permethrin
                                                    53112-28-0,
Pyrimethanil
               57018-04-9, Tolclofos-methyl
                                              57966-95-7, Cymoxanil
                                                 65907-30-4, Furathiocarb
59669-26-0, Thiodicarb
                         60168-88-9, Fenarimol
                          68359-37-5, Cyfluthrin
66230-04-4
            67375-30-8
                                                   69327-76-0, Buprofezin
69409-94-5, Fluvalinate
                         72490-01-8, Fenoxycarb
                                                   74115-24-5,
              74738-17-3, Fenpiclonil
                                         78587-05-0, Hexythiazox
Clofentezine
81412-43-3, Tridemorph 82657-04-3, Bifenthrin
                                               83733-82-8,
Fosmethilan
             88671-89-0, Myclobutanil
                                         96489-71-3, Pyridaben
                                                    112143-82-5,
97886-45-8, Dithiopyr
                        101463-69-8, Flufenoxuron
            112410-23-8, Tebufenozide
                                        113036-88-7, Flucycloxuron
Triazamate
114369-43-6, Fenbuconazole
                            117718-60-2, Thiazopyr
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
   (controlled-release compns. contg. agricultural pesticide, microbicide
   or antifouling agent incorporated into metal oxide glass)
130000-40-7, Thifluzamide
RL: AGR (Agricultural use); PEP (Physical, engineering or chemical
process); BIOL (Biological study); PROC (Process); USES (Uses)
   (controlled-release compns. contg. agricultural pesticide, microbicide
   or antifouling agent incorporated into metal oxide glass)
101-20-2, 3,4,4'-Trichlorocarbanilide
                                      126-06-7
                                                   137-26-8,
Tetramethylthiuram disulfide
                              137-30-4, Zinc dimethyl dithiocarbamate
148-79-8, 2-(4-Thiazolyl)benzimidazole 719-96-0, N-
(Fluorodichloromethylthio)phthalimide
                                        971-66-4 1003-07-2D, 3-
                                       1085-98-9,
Isothiazolone, haloalkoxyaryl derivs.
N, N-Dimethyl-N'-phenyl-N'-fluorodichloromethylthiosulfamide
                                                              1897-45-6,
2,4,5,6-Tetrachloroisophthalonitrile
                                      2634-33-5, 1,2-
                        6317-18-6, Methylene-bisthiocyanate
Benzisothiazolin-3-one
10222-01-2, 2,2-Dibromo-3-nitrilopropionamide
                                               12122-67-7, Zinc
ethylenebisdithiocarbamate
                             12427-38-2
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4-(methylsulfonyl)pyridine
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                         20018-09-1, Diiodomethyl p-tolyl sulfone
2-pyridinethiol-1-oxide
21564-17-0, 2-Thiocyanomethylthiobenzothiazole 26530-20-1,
2-n-Octyl-3-isothiazolone
                           26656-82-6, Copper thiocyanate
                                          35691-65-7, 1,2-Dibromo-2,4-
30007-47-7, 5-Bromo-5-nitro-1,3-dioxane
dicyanobutane 57063-29-3, 4,5-Dichloro-2-cyclohexyl-3-
                             67412-55-9, N,N-Dimethyl
isothiazolone
                64440-88-6
                                   83364-12-9
                      82633-79-2
                                                216006-67-6
dichlorophenyl urea
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
   (controlled-release compns. contg. agricultural pesticide, microbicide
   or antifouling agent incorporated into metal oxide glass)
2682-20-4, 2-Methyl-3-isothiazolone 26172-55-4
28159-98-0, 2-(Methylthio)-4-tert-butylamino-6-(cyclopropylamino)-s-
          55406-53-6, 3-Iodo-2-propynyl butyl carbamate
triazine
64359-81-5, 4,5-Dichloro-2-n-octyl-3-isothiazolone
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or
chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
   (controlled-release compns. contg. agricultural pesticide, microbicide
   or antifouling agent incorporated into metal oxide glass)
78-10-4
                    555-31-7
                              555-75-9, Triethoxyaluminum
          78-62-6
           992-92-7, Tetramethoxytitanium
                                            1071-76-7,
Tetrabutoxyzirconium
                       1185-55-3
                                   2031-67-6
                                               2081-12-1,
Tetra-tert-butoxyzirconium
                             2530-85-0
                                         2943-75-1
                                                     2996-92-1
                                                                 3087-36-3
3173-69-1, Tetraethoxytin
                            5058-42-4
                                        5926-29-4
                                                    7637-16-3,
Tetraethoxyvanadium 16068-37-4, Bis(triethoxysilyl)ethane
```

ΙT

IT

TΤ

ΙT

RL: AGR (Agricultural use); BUU (Biological use, unclassified); PEP

25590-89-0

41454-09-5 57813-67-9, 3-Butenyl-triethoxy silane

27961-67-7.

21142-29-0

Tetraethoxyzirconium

227083-00-3

Tetramethoxytin

87135-01-1

(Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (precursor; controlled-release compns. contg. agricultural pesticide, microbicide or antifouling agent incorporated into metal oxide glass) L83 ANSWER 8 OF 17 HCAPLUS COPYRIGHT 2002 ACS 1998:585771 HCAPLUS AN DN 129:246461 ΤI Antibacterial fungicidal polyolefin monofilaments IN Kimura, Yoshikazu; Shoda, Masahiro PA Kanebo, Ltd., Japan; Kanebo Kasei K. K. SO Jpn. Kokai Tokkyo Koho, 10 pp. CODEN: JKXXAF DT Patent LA Japanese ICM D01F006-46 IC ICS A01N025-10; A01N043-74; A01N059-00; D01F001-10 CC 40-2 (Textiles and Fibers) FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE -----19980908 JP 10237716 A2 PΙ JP 1997-36240 19970220 AΒ The antibacterial monofilaments consist mainly of polyolefins and contain antibacterial zeolites and thiazoline compd. org. bactericides. The monofilaments are useful for air filters and antibacterial fabrics. A compn. contg. polypropylene 100, antibacterial A zeolite (contg. 10 parts Ag ion per 100 parts zeolite) 0.5, and 2-n-octyl-4-isothiazolin -3-one 0.1 part was melt spun and drawn to give monofilaments with tenacity 6.0-7.0 g/denier and no yarn breaks. The spun monofilament were made into a woven net to give a filter exhibiting bacteria redn. amt. .gtoreq.99.9% as detd. by a specified test and good resistance to fungus growth and good light resistance. antibacterial polyolefin fiber monofilament; fungicidal polyolefin fiber ST monofilament; polypropylene fiber monofilament antibacterial; polyethylene fiber monofilament antibacterial; zeolite bactericide polyolefin fiber monofilament; octylisothiazolinone fungicide polyolefin fiber; air filter antibacterial polyolefin monofilament; fabric antibacterial polyolefin monofilament Polyolefin fibers Polypropene fibers, uses RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (antibacterial fungicidal polyolefin monofilaments contg. metal ion-contg. zeolites and org. thiazoline compds.) IT A zeolites RL: BUU (Biological use, unclassified); MOA (Modifier or additive use); PRP (Properties); BIOL (Biological study); USES (Uses) (contg. silver ion, copper ion, or zinc ion; antibacterial fungicidal polyolefin monofilaments contg.) ΙT Polyolefin fibers Polypropene fibers, uses RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (ethylene-propene; antibacterial fungicidal polyolefin monofilaments contg. metal ion-contg. zeolites and org. thiazoline compds.) IT Polyolefin fibers RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses) (ethylene; antibacterial fungicidal polyolefin monofilaments contg.

```
metal ion-contg. zeolites and org. thiazoline compds.)
     Filters
ΙT
     Textiles
        (for air; antibacterial fungicidal polyolefin monofilaments contg.
        metal ion-contg. zeolites and org. thiazoline compds. for)
TΤ
     Fungicides
        (org. thiazoline compds.; antibacterial fungicidal polyolefin
        monofilaments contg.)
ΙT
     X zeolites
       Y zeolites
     RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
     PRP (Properties); BIOL (Biological study); USES (Uses)
        (silver ion-contg.; antibacterial fungicidal polyolefin monofilaments
        contg.)
ΤТ
     Antibacterial agents
        (zeolites contg. silver, copper, or zinc ion; antibacterial fungicidal
        polyolefin monofilaments contg.)
ΙT
     7631-86-9, Silica, uses
     RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
     PRP (Properties); BIOL (Biological study); USES (Uses)
        (amorphous, fungicide-contg. substrate; antibacterial fungicidal
        polyolefin monofilaments contg. metal ion-contg. zeolites and org.
        thiazoline compds. contg.)
IT
     9002-88-4, Polyethylene
                               9010-79-1, Ethylene-propylene copolymer
     25085-53-4, Isotactic polypropylene
     RL: PEP (Physical, engineering or chemical process); POF (Polymer in
     formulation); PRP (Properties); TEM (Technical or engineered material
     use); PROC (Process); USES (Uses)
        (fiber; antibacterial fungicidal polyolefin monofilaments contg. metal
        ion-contg. zeolites and org. thiazoline compds.)
     26530-20-1
IT
     RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
     PRP (Properties); BIOL (Biological study); USES (Uses)
        (fungicide; antibacterial fungicidal polyolefin monofilaments contg.)
     14701-21-4, Silver ion, uses 15158-11-9, uses
                                                       23713-49-7, Zinc ion,
ΙT
     uses
     RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
     PRP (Properties); BIOL (Biological study); USES (Uses)
        (zeolites contg., bactericide; antibacterial fungicidal polyolefin
        monofilaments contq.)
L83 ANSWER 9 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN
     1998:221006 HCAPLUS
DN
     128:254064
ΤI
     Antimicrobial composition
IN
     Suganuma, Akio
     Suganuma, Akio, Japan; Fujiwara, Hitoshi
PΑ
SO
     Eur. Pat. Appl., 14 pp.
     CODEN: EPXXDW
DT
     Patent
LA
     English
IC
     ICM A01N059-26
         A01N059-16; A01N059-06
     ICS
     A01N059-26, A01N047-30, A01N047-18, A01N047-04, A01N043-80, A01N043-78,
     A01N043-38; A01N059-26, A01N047-30, A01N047-18, A01N047-04, A01N043-80,
     A01N043-78, A01N043-38; A01N059-06, A01N047-30, A01N047-18
     5-2 (Agrochemical Bioregulators)
CC
     Section cross-reference(s): 63
FAN.CNT 1
                                                             DATE
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                      ____
                                                             19970922 <--
     EP 834253
                       A2
                            19980408
                                           EP 1997-307369
PΙ
     EP. 834253
                      A3
                            19980916
```

```
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     JP 10109912
                      A2
                            19980428
                                           JP 1996-264139
                                                            19961004 <--
     CN 1181185
                       Α
                            19980513
                                           CN 1997-121118
                                                            19970930 <--
     US 5985795
                       Α
                            19991116
                                           US 1997-943618
                                                            19971003 <--
PRAI JP 1996-264139
                            19961004
                                     <--
     An antimicrobial compn. comprises an inorg. metal antimicrobial agent,
     preferably a zirconium phosphate, a thiazole antimicrobial agent,
    preferably an isothiazolin-3-one compd., a haloalkylthio
     antimicrobial agent, preferably a haloalkylthiosulfimide compd., an
     imidazole antimicrobial agent, preferably a cyclic compd. of
     benzimidazole, and an urea antimicrobial agent, preferably a halophenyl
     deriv. of dimethylurea, as the essential compds. The compn. exhibits an
     excellent antimicrobial activity against various kinds of Eumycetes,
     bacteria, Actinomycetes, yeast and algae, is excellent in the quickness
     and persistency of the effect, and is extremely stable.
ST
     antimicrobial compn zirconium phosphate isothiazolinone
     haloalkylthiosulfimide
ΙT
     Glass, biological studies
       Zeolites (synthetic), biological studies
     RL: AGR (Agricultural use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (antimicrobial compn. contg.)
IT
     Yeast
        (control by multicomponent antimicrobial compn.)
ΙT
     Algicides
        (multicomponent algicidal compn.)
     Actinomycetes
IT
       Antibacterial agents
       Fungicides
        (multicomponent antimicrobial compn.)
     95-16-9D, Benzothiazole, derivs. 148-79-8, 2-(4-Thiazolyl)benzimidázole
ΙT
     330-54-1, 3-(3,4-Dichlorophenyl)-1,1-dimethylurea 1003-07-2D,
     Isothiazol-3-one, derivs. 1085-98-9 2634-33-5, 1,2-
     Benzisothiazolin-3-one
                             7440-22-4D, Silver, salts, biological
     studies
               7803-58-9D, Sulfamide, haloalkylthio derivs. 13463-67-7,
                                   13765-95-2, Zirconium phosphate
     Titania, biological studies
     18138-18-6D, Thiophthalimide, haloalkyl derivs.
                                                      27208-19-1D, Sulfimide,
     haloalkylthio derivs.
     RL: AGR (Agricultural use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (antimicrobial compn. contg.)
L83
    ANSWER 10 OF 17 HCAPLUS COPYRIGHT 2002 ACS
     1998:217425 HCAPLUS
AN
DN
     128:254063
     A material, method and apparatus for inhibiting microbial growth in an
ΤI
     aqueous medium
     Batts, Gregory Nigel; Moore, Christoper Peter; Leeming, Karen; Wettling,
IN
     Danielle
PΑ
     Eastman Kodak Co., USA
SO
     Eur. Pat. Appl., 16 pp.
     CODEN: EPXXDW
DT
     Patent
LA
     English
IC
     ICM A01N025-12
        A01N025-26; C02F001-50
     5-2 (Agrochemical Bioregulators)
     Section cross-reference(s): 28, 74
FAN.CNT 1
                                           APPLICATION NO.
     PATENT NO.
                      KIND DATE
                                                            DATE
                                           EP 1997-202345
                                                            19970725 <--
     EP 832561
                     A2
                            19980401
PΤ
```

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EP 832561
                            19990217
                       AЗ
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     CA 2207168
                       AΑ
                            19980130
                                           CA 1997-2207168
                                                            19970606 <--
     US 5855899
                            19990105
                                           US 1997-882792
                                                             19970626 <--
                       Α
     AU 9731586
                      A1
                            19980205
                                           AU 1997-31586
                                                            19970729 <--
     AU 736967
                       В2
                            20010809
     JP 10087405
                       A2
                            19980407
                                           JP 1997-203453
                                                            19970729 <--
PRAI GB 1996-15944
                      Α
                            19960730 <--
OS
    MARPAT 128:254063
    A biocidal material comprises a biocide immobilized in
AB
     a porous inorg. polymer network such as a sol-gel matrix.
                                                                The
     polymer may be coated on an inorg. support e.g. pumice stones.
     The material can be used for inhibiting microbial growth in an aq. medium
     e.g. the wash water of a photoprocessing system. The material can be
     housed in a flow-through container. The biocides are
     isothiazolinones (Markush given). The prepn. of N-
     hexadecylisothiazolinone is given.
    biocide immobilization aq system photoprocessing;
ST
     isothiazolinone deriv prepn biocide
TT
     Biocides
     Photographic processing
        (biocide immobilized in porous sol-gel matrix for
        photoprocessing systems)
ΙT
     19602-82-5P
                   205171-02-4P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (intermediate in isothiazolinone biocide prepn.)
ΙT
     7631-86-9, Silicon dioxide, uses 13463-67-7,
     Titanium dioxide, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (porous sol-gel matrix for biocides in
        photoprocessing systems)
ΙT
     112153-01-2P
     RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (prepn. as biocide for immobilization in photoprocessing
        systems)
IT
     7732-18-5, Water, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (prepn. of)
ΙT
     119-80-2
     RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological
     study); RACT (Reactant or reagent); USES (Uses)
        (reactant in isothiazolinone biocide prepn.)
L83
    ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN
     1997:107325 HCAPLUS
DN
     126:119152
     Bacterium- and mildew-preventive pre-coated metal plates
ΤI
     Yamamoto, Naotaka; Kobori, Satoru
ΙN
     Nippon Paint Co Ltd, Japan
PA
     Jpn. Kokai Tokkyo Koho, 9 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
IC
     ICM C09D005-14
     ICS B32B015-08; B32B027-18
CC
     42-10 (Coatings, Inks, and Related Products)
     Section cross-reference(s): 5, 55, 56
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                             DATE
```

```
JP 1995-153875
     JP 08325485
PΙ
                       A2
                            19961210
                                                             19950529 <--
     Title plates contain .gtoreq.2 layers of coatings with the top
     coating films contg. 0.01-5% 2,3,5,6-tetrachloro-4-
     (methylsulfonyl)pyridine (I)-contg. antimildew agents and 0.1-5%
     bactericidal inorg. composites consisting of Ag, Cu, Zn, and/or Li ions
     and Si, Ca, and/or Al compd. supports with a diam. of 0.05-5 .mu.m. A
     phosphated galvanized steel plate was coated with a primer,
     baked, covered with a Fleki coat 150 white contg. 0.01% 70:20:10
     I, 2-(4-thiazolyl)-1H-benzoimidazole, and 2-N-octyl-4-
     isothiazoline-3-one blend and 0.1% 0.5-.mu.m SiO2 contg.
     5\% Ag+ to a 15-.mu.m thickness, and baked at 230.degree. for 20 s to form
     a plate showing good coating adhesion even after 180.degree.
     bending, anticorrosion (JIS K 5400.9, 2,000 h), and
     discoloration/microbial prevention over 1 yr.
    bactericidal antimildew colored topcoat metal;
     tetrachloromethylsulfonylpyridine mildew inhibitor topcoat metal;
     discoloration prevention tetrachloromethylsulfonylpyridine topcoat metal;
     inorg composite bactericide coating metal
TT
     Topcoats (coatings)
        (bactericidal, mildew-preventive; colored topcoats contg.
        tetrachloromethylsulfonylpyridine and metal ion-contg. inorg.
        bactericides for metals)
IT
     Antibacterial agents
       Fungicides
        (colored topcoats contg. tetrachloromethylsulfonylpyridine and metal
        ion-contg. inorg. bactericides for metals)
IT
     Galvanized steel
     Metals, miscellaneous
     RL: MSC (Miscellaneous)
        (plates; colored topcoats contg. tetrachloromethylsulfonylpyridine and
        metal ion-contg. inorg. bactericides for metals)
ΙT
     Apatite-group minerals
       Zeolites (synthetic), uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (supports, metal ion-contg., as bactericide; colored topcoats contg.
        tetrachloromethylsulfonylpyridine and metal ion-contg. inorg.
        bactericides for metals)
                1897-45-6, 2,4,5,6-Tetrachloroisophthalonitrile
ΙT
     148-79-8
     2, 3, 5, 6-Tetrachloro-4-(methylsulfonyl)pyridine
                                                       20018-09-1,
     Diiodomethyl-p-tolylsulfone 26530-20-1
     RL: MOA (Modifier or additive use); USES (Uses)
        (mildew inhibitor; colored topcoats contg.
        tetrachloromethylsulfonylpyridine and metal ion-contg. inorg.
        bactericides for metals)
     14701-21-4, Silver ion, uses 23713-49-7, Zinc ion, uses
                                    15158-11-9, uses
ΙT
                                                        17341-24-1, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (on inorg. supports, as bactericide; colored topcoats contg.
        tetrachloromethylsulfonylpyridine and metal ion-contg. inorg.
        bactericides for metals)
     12597-69-2, Steel, miscellaneous
                                         172452-05-0, Uniflon C
                                                                  186004-18-2,
ΙT
     Fleki Coat 150
                      186004-22-8, Nippe Supercoat 200HQ
     186004-44-4, Silicoat 150
                                 186100-99-2, Vinysol 1000
     RL: MSC (Miscellaneous)
        (plated plates; colored topcoats contg. tetrachloromethylsulfonylpyridi
        ne and metal ion-contg. inorg. bactericides for metals)
                                           11149-84-1
ΙT
     7429-90-5, Aluminum, miscellaneous
     RL: MSC (Miscellaneous)
        (platings, on steel plates; colored topcoats contg.
        tetrachloromethylsulfonylpyridine and metal ion-contg. inorg.
        bactericides for metals)
IT
     7631-86-9, Silica, uses
     RL: MOA (Modifier or additive use); USES (Uses)
```

(supports, metal ion-contg., as bactericide; colored topcoats contg. tetrachloromethylsulfonylpyridine and metal ion-contg. inorg. bactericides for metals)

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L83 ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2002 ACS
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AN 1996:400605 HCAPLUS

DN 125:79402

TI Antimicrobial resin compositions containing thiazolines and metals and/or metal compounds

IN Oosugi, Takashi; Uematsu, Yasushi; Takahashi, Hideyuki

PA Sekisui Chemical Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp. CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A01N059-16

ICS A01N043-78; A01N059-20

CC 5-2 (Agrochemical Bioregulators)

Section cross-reference(s): 37

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 08092019 A2 19960409 JP 1994-231225 19940927 <--

AB Antimicrobial compns. contain synthetic polymers 100, thiazolines 0.01-10, and antimicrobial metals and/or metal compds. 0.001-10 wt. parts. The compns. show long-lasting antimicrobial activity and do not show discoloration when molding. Polypropylene 100, 2-n-isooctyl-4-isothiazolin-3-one 0.5, and Ag Zr phosphate 0.03 part were mixed to show good antibacterial and antifungal activities.

ST metal thiazoline antimicrobial polymer

# IT Bactericides, Disinfectants, and Antiseptics

### Fungicides and Fungistats

(antimicrobial synthetic resin compns. contg. thiazolines and metals and/or metal compds.)

### IT Zeolites, biological studies

RL: BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(Ag, antimicrobial synthetic resin compns. contg. thiazolines and metals and/or metal compds.)

# IT 178408-50-9

RL: BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(antimicrobial synthetic resin compns. contg. thiazolines and metals and/or metal compds.)

# IT 26530-15-4

RL: BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(antimicrobial synthetic resin compns. contg. thiazolines and metals and/or metal compds.)

IT 9002-88-4, Polyethylene 9003-07-0, Polypropylene

RL: POF (Polymer in formulation); USES (Uses)

(antimicrobial synthetic resin compns. contg. thiazolines and metals and/or metal compds.)

- L83 ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2002 ACS
- AN 1994:695095 HCAPLUS
- DN 121:295095
- TI Granulation of antimicrobial isothiazolone compounds
- IN Yamanari, Koichiro; Watanabe, Shigeki
- PA Tokyo Juki Industrial Co Ltd, Japan
- SO Jpn. Kokai Tokkyo Koho, 3 pp.

```
CODEN: JKXXAF
DΤ
     Patent
     Japanese
LA
     ICM A01N043-80
TC
     ICS A01N025-12
CC
     5-2 (Agrochemical Bioregulators)
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                             APPLICATION NO.
                                                                DATE
                             _____
                                             _____
PΙ
     JP 06227916
                       A2
                             19940816
                                              JP 1993-16483
                                                                19930203 <--
     An insol. and sparingly sol. melted isothiazolone compd. is
AB
     added to heated water, the oily droplets are dispersed, the aq. phase is
     cooled rapidly, and a ppt. formed is isolated to give a granular
     form of isothiazolone compd. The antimicrobial granules
     have a wide application as additives to industrial goods like plastic and
             The manufg. process for the granules is given,
     paint.
     but no specific applications are shown as examples.
ST
     granulation antimicrobial isothiazolone compd
TΤ
     Bactericides, Disinfectants, and Antiseptics
       Fungicides and Fungistats
       Granulation
        (granulation of antimicrobial isothiazolone
        compds.)
ΙT
     1003-07-2D, Isothiazolin-3-one, derivs.
     64359-81-5
     RL: PEP (Physical, engineering or chemical process); PROC (Process)
        (granulation of antimicrobial isothiazolone
        compds.)
    ANSWER 14 OF 17 HCAPLUS COPYRIGHT 2002 ACS
L83
ΑN
     1993:525280 HCAPLUS
DN
     119:125280
     Coating compositions for surface disinfection
ΤI
IN
     Rollen, Jarl Erik
PΑ
     Swed.
     PCT Int. Appl., 13 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
     ICM A61L009-00
IC
     ICS
         B05D005-00; E04B001-72
CC
     63-8 (Pharmaceuticals)
FAN.CNT 1
                             DATE
                                             APPLICATION NO.
     PATENT NO.
                       KIND
                       ____
                              _____
                                              -----
PΙ
     WO 9309817
                        A1
                             19930527
                                             WO 1992-SE763
                                                                19921105 <--
             AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP,
         KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE, UA, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE, BF,
BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG
     SE 9103438
                              19930522
                                              SE 1991-3438
                                                                19911121 <--
                        Α
     SE 469415
                        В
                              19930705
     SE 469415
                        C
                              19931028
                                              AU 1992-29590
                                                                19921105 <--
                        A1
                              19930615
     AU 9229590
                              19951109
     AU 664215
                        B2
                        Α1
                              19940914
                                              EP 1992-924068
                                                                19921105 <--
     EP 614380
         R: AT, BE, DE, DK, ES, FR, GB, IT, NL
                        T2
                              19950209
                                              JP 1992-509192
                                                                19921105 <--
     JP 07501243
                                                                19921105 <--
     BR 9206791
                        Α
                              19951031
                                              BR 1992-6791
                                                                19940518 <--
                                              FI 1994-2312
     FI 9402312
                        Α
                              19940518
                                              NO 1994-1847
                                                                19940518 <--
     NO 9401847
                        Α
                              19940524
PRAI SE 1991-3438
                              19911121
                                        <--
                              19921105
                                        <--
     WO 1992-SE763
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Surfaces or walls and ceilings are coated with a layer of a
AB
     coating compn. which is porous and open for diffusion
     and preventing condensation. The compn. comprises granules of org. or
     expanded inorg. materials, e.g. zeolite, and binders. After
     coating, a water sol. sanitizer such as glutaraldehyde is spread
     upon the layer of the porous coating at repeated
     intervals of time. As the water is evapd. sanitizer remains in the
    pore system of the coating compn. A surface was
    coated with the invention coating, then it was sanitated
with a sanitizer and left to dry. The surface was infected with org.
    material from dead animal bodies and kept in alternating temp. and
     humidity. The surface was clean >7 days as compared with a smooth surface
     which was infected within 24 h.
     surface disinfectant porous coating compn;
     zeolite glutaraldehyde coating surface disinfectant
    Bactericides, Disinfectants, and Antiseptics
       Fungicides and Fungistats
     Bentonite, biological studies
     Fuller's earth
     Perlite
     Salts, biological studies
       Zeolite-group minerals
     RL: BIOL (Biological study)
        (disinfectant coating compn. contg., for surfaces)
TΤ
     Sulfonic acids, biological studies
     RL: BIOL (Biological study)
        (alkylarene, disinfectant coating compn. contg., for
        surfaces)
ΙT
     Amides, biological studies
     RL: BIOL (Biological study)
        (aryl, disinfectant coating compn. contg., for surfaces)
     9004-34-6, Cellulose, biological studies 9005-25-8, Starch, biological
ΙT
               9005-25-8D; Starch, derivs. 13397-24-5, Gypsum, biological
     studies
               14464-46-1, Cristobalite (SiO2) 125794-71-0
     studies
     137662-59-0
                   463-77-4D, Carbamic acid, iodinated, alkynalkyl
               1335-30-4, Aluminum silicate
                                             1343-98-2D, Silicic acid, alkali
     derivs.
                   2634-33-5, 1,2-Benzisothiazol-3(2H) one
    metal salts
     RL: BIOL (Biological study)
        (disinfectant coating compn. contg., for surfaces)
IT
     7631-86-9, Silicon dioxide, biological studies
     RL: BIOL (Biological study)
        (micronized, disinfectant coating compn. contg., for
        surfaces)
ΙT
     111-30-8, Glutaraldehyde
                                 6152-33-6 7173-51-5, Didecyl dimethyl
     ammonium chloride
     RL: USES (Uses)
        (soln. contq., and coating compn., for surface disinfection)
    ANSWER 15 OF 17 HCAPLUS COPYRIGHT 2002 ACS
L83
     1992:526469 HCAPLUS
ΑN
DN
     117:126469
     Polymers containing antimicrobial and mothproofing volatile substances
ΤI
ΙN
     Sumida, Nobuo; Yamada, Akira
     Bio Giken K. K., Japan
PΑ
SO
     Jpn. Kokai Tokkyo Koho, 4 pp.
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
     ICM A01N025-08
TC
     ICS A01N025-18; A01N025-34
CC
     5-4 (Agrochemical Bioregulators)
FAN.CNT 1
```

APPLICATION NO. DATE

KIND DATE

PATENT NO.

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JP 04074101
                      A2
                            19920309
                                            JP 1990-185305
                                                             19900716 <--
PΙ
     Polymers contain volatile substances adsorbed on zeolites. The
ΑB
     volatile substances cause an exothermic reaction in the adsorption
     process. The polymers are useful for clothes, carpets, filters for air
     conditioners, etc. A pyrethroid adsorbed on zeolite was mixed
     with polypropylene powder and formed into sheets, which showed good
     mothproofing activity, vs. poor activity, without adsorption.
ST
     zeolite volatile mothproofing antimicrobial polymer
IT
     Pyrethrins and Pyrethroids
     RL: BIOL (Biological study)
        (adsorbed on zeolite, polymers contg.)
IT
     Zeolites, biological studies
     RL: BIOL (Biological study)
        (antimicrobial and mothproofing volatile substances adsorbed on,
        polymers contg.)
     Polymers, biological studies RL: BIOL (Biological study)
IT
        (contg. volatile substances adsorbed on zeolite, for
        antimicrobial and mothproofing activity)
     Bactericides, Disinfectants, and Antiseptics
ΙT
        (volatile, adsorbed on zeolite, polymers contg.)
IT
     Mothproofing
        (agents, volatile, adsorbed on zeolite, polymers contg.)
IT
     Fungicides and Fungistats
        (volatile, adsorbed on zeolite, polymers contg.)
     57-06-7, Allyl isothiocyanate
                                     89-83-8, Thymol
                                                        90-43-7,
IT
     [1,1'-Biphenyl]-2-ol 91-20-3, Naphthalene, biological studies
                                                                         92 - 52 - 4
     Diphenyl, biological studies
                                     93-55-0
                                              105-39-5, Ethyl chloroacetate
     106-46-7, p-Dichlorobenzene
                                    111-30-8, Glutaraldehyde
                                                               122-79-2, Phenyl
               127-90-2
                          499-44-5, Hinokitiol
                                                  3785-34-0,
     acetate
     1,2-Bis(bromoacetoxy)ethane 26172-55-4
     RL: BIOL (Biological study)
        (adsorbed on zeolite, polymers contg., for microbicidal
        activity and mothproofing)
     9002-86-2, PVC
ΙT
                      9003-07-0, Polypropylene
     RL: BIOL (Biological study)
        (contg. volatile substances adsorbed on zeolite, for
        antimicrobial and mothproofing activity)
     ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2002 ACS
L83
     1992:464825 HCAPLUS
ΑN
DN
     117:64825
     Microbicides mixed with porous materials, nonwoven fabrics,
TI
     fibers, or polymers
     Sumida, Nobuo; Yamada, Akira
ΙN
     Bio Giken K. K., Japan
PΑ
SO
     Jpn. Kokai Tokkyo Koho, 4 pp.
     CODEN: JKXXAF
\mathtt{DT}
     Patent
LA
     Japanese
IC
     ICM A01N043-80
     ICS A01N025-10; A01N037-04; A01N037-34; A01N043-40; A61K009-70
CC
     5-2 (Agrochemical Bioregulators)
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO. DATE
                                                              19900702 <--
                             19920302
                                            JP 1990-172739
PΙ
     JP 04066505
                       A2
     Bactericidal and fungicidal 1,2-bis(bromoacetoxy)ethane (I),
AΒ
     1,2-bis(bromoacetoxy)propane, 2,2-dibromo-3-nitrilopropionamide,
     5-chloro-2-methylisothiazolin-3-one, 2-pyridinethiol-3-oxide
     (II) Na salt, and/or II Zn salt are used with carriers, such as
     porous materials, nonwoven fabrics, fibers, or polymers. I (0.03
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g) adsorbed on CA-110P (zeolite) totally controlled Aspergillus
    niger, Penicillium citrinum, and Proteus, vs. less effect, for I itself.
ST
    bromoacetoxyethane bromoacetoxypropane bactericide fungicide
    porous carrier; bromonitrilopropionamide
    chloromethylisothiazolinone bactericide nonwoven fabric;
    pyridinethiol oxide polymer bactericide fungicide
ΙT
    Porous materials and Cellular materials
    Synthetic fibers, polymeric
       Zeolites, biological studies
    RL: BIOL (Biological study)
        (bactericides- and fungicides-contg.)
ΙT
    Bactericides, Disinfectants, and Antiseptics
       Fungicides and Fungistats
        (carriers for, porous materials and nonwoven fabrics and
        fibers and polymers as)
ΙT
    Zeolites, biological studies
    RL: BIOL (Biological study)
        (X, bactericides- and fungicides-contg.)
     471-34-1, Calcium carbonate, biological studies
                                                       9002-84-0, Teflon
TT
     9002-86-2, Poly(vinyl chloride)
                                     9003-07-0, Polypropylene
    RL: BIOL (Biological study)
        (bactericides- and fungicides-contg.)
                                              3811-73-2, 2-Pyridinethiol
     3785-34-0, 1,2-Bis(bromoacetoxy)ethane
TΤ
     1-oxide sodium salt 10222-01-2, 2,2-Dibromo-3-nitrilopropionamide
    13463-41-7, 2-Pyridinethiol 1-oxide zinc salt 26172-55-4
   · 37102-72-0, 1,2-Bis(bromoacetoxy)propane
    'RL: BIOL (Biological study)
        (microbicide, incorporated into porous materials)
L83 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2002 ACS
AN
     1981:492347 HCAPLUS
DN
    95:92347
ΤI
    Water dispersible powdered antifouling agents
PΑ
    Chiyoda Kagaku Kenkyusho, Japan
     Jpn. Kokai Tokkyo Koho, 3 pp.
SO
    CODEN: JKXXAF
DT
    Patent
     Japanese
LA
IC
    A01N025-08
     5-2 (Agrochemicals)
CC
FAN.CNT 1
                     KIND DATE
                                           APPLICATION NO. DATE
     PATENT NO.
                            _____
                                           _____
                                          JP 1979-129337 19791007 <--
     JP 56053602 A2
                            19810513
PΙ
     Bactericides (e.g. halogenated org. compds., org. quaternary ammonium
AΒ
     salts, org. S compds.), impregnated into porous inorg. carriers,
     are water-dispersible disinfectant powders. Thus, 200 parts
     2-bromo-2-nitrobutanol [22632-02-6] was adsorbed onto 100 parts of flaky
    porous Ca silicate. The material dispersed in water evenly and
     prevented growth of Aspergillus niger and Escherichia coli at 4 and 21
     ppm, resp.
ST
    bactericide disinfectant water dispersible
IT
     Bactericides, Disinfectants and Antiseptics
     Fungicides and Fungistats
        (water-dispersible)
IT
     1344-95-2 7631-86-9, biological studies
     RL: BIOL (Biological study)
        (as carrier for bactericides, water-dispersible)
     77-48-5 122-34-9 2682-20-4 3674-07-5 6317-18-6
IT
     22632-02-6 26172-55-4
                             78710-39-1
                                        78790-18-8
     RL: BIOL (Biological study)
        (bactericide contg., water-dispersible)
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     ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2002 ACS
L91
AN
     1998:758163 HCAPLUS
DN
     130:53743
ΤI
     Solid lubricant-containing coating for coating of
     stainless steel plate with good lubricity
TN
     Yano, Hirokazu; Utakawa, Yoshikatsu; Sakai, Tetsuo
PΑ
     Nisshin Steel Co., Ltd., Japan
     Jpn. Kokai Tokkyo Koho, 7 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
IC
     ICM B05D007-14
     ICS B05D001-28; B05D005-08; B32B015-08; C23C022-24
CC
     42-10 (Coatings, Inks, and Related Products)
FAN.CNT 1
                     KIND DATE
                                           APPLICATION NO.
     PATENT NO.
     _____
                           -----
                                     JP 1997-135891
     JP 10309520 A2
                           19981124
                                                            19970509 <--
PΤ
AΒ
     The coating, with good antibacterial properties, comprises an
     acrylic polymer and/or polyurethane contg. colloid silica 10-30,
     a polyolefin particle (polyethylene) 3-7 and a crosslinking resin (urea
     resin) 1-25 phr.
ST
     polyethylene coating stainless steel lubricity; antibacterial
     polyurethane acrylic polymer coating steel; silica
     polyethylene urea resin coating
     Zeolites (synthetic), biological studies
TT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (Ag; solid lubricant-contg. coating for coating of
        stainless steel plate with good lubricity)
TΤ
     Coating materials
        (bactericidal; solid lubricant-contg. coating for
        coating of stainless steel plate with good lubricity)
TΨ
     Lubricants
        (solid lubricant-contg. coating for coating of
        stainless steel plate with good lubricity)
     Acrylic polymers, uses
IT
     Polyurethanes, uses
     RL: BUU (Biological use, unclassified); PRP (Properties); TEM (Technical
     or engineered material use); BIOL (Biological study); USES (Uses)
        (solid lubricant-contg. coating for coating of
        stainless steel plate with good lubricity)
     Aminoplasts
TΤ
     RL: MOA (Modifier or additive use); USES (Uses)
        (solid lubricant-contg. coating for coating of
        stainless steel plate with good lubricity)
     9080-42-6, Acrylonitrile-sodium styrenesulfonate copolymer
                                                                  21564-17-0,
ΙT
     2-(Thiocyanomethylthio)benzothiazole 26530-20-1
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (solid lubricant-contg. coating for coating of
        stainless steel plate with good lubricity)
     7631-86-9, Silica, uses
                               9002-88-4 9011-05-6, Urea
TT
     RL: MOA (Modifier or additive use); USES (Uses)
        (solid lubricant-contg. coating for coating of
        stainless steel plate with good lubricity)
     11109-50-5, SUS 304
                           11109-52-7, SUS 430
ΙT
     RL: PRP (Properties)
        (solid lubricant-contg. coating for coating of
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stainless steel plate with good lubricity) IT 26530-20-1 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (solid lubricant-contg. coating for coating of stainless steel plate with good lubricity) RN 26530-20-1 HCAPLUS CN 3(2H)-Isothiazolone, 2-octyl- (9CI) (CA INDEX NAME) (CH<sub>2</sub>)<sub>7</sub> - MeTT 7631-86-9, Silica, uses RL: MOA (Modifier or additive use); USES (Uses) (solid lubricant-contg. coating for coating of stainless steel plate with good lubricity) RN 7631-86-9 HCAPLUS CNSilica (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME) o = si = oANSWER 2 OF 9 HCAPLUS COPYRIGHT 2002 ACS L91 1997:801820 HCAPLUS ΑN DN 128:103491 Easy on-and-off stretchable cover materials providing good use feel when TI used on door knobs, microphones, telephones, etc. IN Kobayashi, Hideo; Yamamoto, Hiroyuki; Oishi, Takashi; Matsuda, Shuuji; Sato, Takeo; Ishisaka, Satoshi PΑ Ikari Shodoku K. K., Japan SO Jpn. Kokai Tokkyo Koho, 7 pp. CODEN: JKXXAF DTPatent LA Japanese IC ICM D06M011-32 A01N025-34; A01N031-08; A01N035-08; A01N037-36; A01N037-40; A01N037-46; A01N043-16; A01N043-36; A01N043-40; A01N043-78; A01N043-80; A01N047-08; A01N047-44; A01N059-16; A01N059-20; A45D044-08; A61L009-01; A61L009-16; D03D001-00 CC 42-13 (Coatings, Inks, and Related Products) FAN.CNT 1 KIND PATENT NO. DATE APPLICATION NO. DATE \_\_\_\_\_ PΙ JP 09324366 Α2 19971216 JP 1996-140542 19960603 <--The title materials are disclosed comprising stretchable cylindrical AB materials contg. antistatic agents, antimicrobial agents, deodorants, and fragrances. ST resilient cover door knob; microphone resilient cover; telephone resilient cover; antistatic agent resilient cover; antimicrobial agent resilient cover; deodorant resilient cover; perfume resilient cover ΙT Essential oils RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Melaleuca; easy on-and-off stretchable cover materials used on door

knobs and microphones and telephones)

```
ΙT
    Charcoal
     RL: NUU (Other use, unclassified); USES (Uses)
        (activated; easy on-and-off stretchable cover materials used on door
        knobs and microphones and telephones)
    Quaternary ammonium compounds, biological studies
TT
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (alkylbenzyldimethyl, chlorides; easy on-and-off stretchable cover
        materials used on door knobs and microphones and telephones)
TΤ
    Textiles
        (cylindrical; easy on-and-off stretchable cover materials used on door
        knobs and microphones and telephones)
TΤ
    Antimicrobial agents
    Antistatic agents
    Deodorants
    Perfumes
    Surfactants
     Telephones
        (easy on-and-off stretchable cover materials used on door knobs and
        microphones and telephones)
TT
    Betaines
    Carboxylic acids, uses
    Chlorophylls, uses
    Essential oils
    Flavonoids
    Glycols, uses
    Humic acids
       Silica gel, uses
    Terpenes, uses
       Zeolites (synthetic), uses
    RL: NUU (Other use, unclassified); USES (Uses)
        (easy on-and-off stretchable cover materials used on door knobs and
        microphones and telephones)
    Carbon fibers, uses
TΤ
    RL: TEM (Technical or engineered material use); USES (Uses)
        (easy on-and-off stretchable cover materials used on door knobs and
       microphones and telephones)
    Metallic fibers
TΤ
    RL: TEM (Technical or engineered material use); USES (Uses)
        (easy on-and-off stretchable cover materials used on door knobs and
        microphones and telephones)
ΙT
    Natural rubber, uses
    RL: TEM (Technical or engineered material use); USES (Uses)
        (easy on-and-off stretchable cover materials used on door knobs and
       microphones and telephones)
ΙT
    Synthetic rubber, uses
    RL: TEM (Technical or engineered material use); USES (Uses)
        (easy on-and-off stretchable cover materials used on door knobs and
        microphones and telephones)
IT
    Polyurethanes, uses
    RL: TEM (Technical or engineered material use); USES (Uses)
        (foams; easy on-and-off stretchable cover materials used on door knobs
        and microphones and telephones)
IT
    Doors
        (knobs; easy on-and-off stretchable cover materials used on door knobs
        and microphones and telephones)
TT
    Acoustic devices
        (microphones; easy on-and-off stretchable cover materials used on door
        knobs and microphones and telephones)
                                             70-30-4
IT
               69-72-7, biological studies
                                                        99-96-7D, esters
                           719-96-0
                                                                13463-41-7
                499-44-5
                                      4418-26-2
                                                  13108-52-6
     18472-51-0 26530-20-1
                             102140-91-0
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
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(Uses)

(easy on-and-off stretchable cover materials used on door knobs and microphones and telephones)

IT 50-81-7, L-Ascorbic acid, uses 64-19-7, Acetic acid, uses 110-15-6, Butanedioic acid, uses 111-30-8, Pentanedial 142-90-5 1306-06-5, Hydroxylapatite (Ca5(OH)(PO4)3)

RL: NUU (Other use, unclassified); USES (Uses) (easy on-and-off stretchable cover materials used on door knobs and

microphones and telephones)

IT 26530-20-1

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(easy on-and-off stretchable cover materials used on door knobs and microphones and telephones)

RN 26530-20-1 HCAPLUS

CN 3(2H)-Isothiazolone, 2-octyl- (9CI) (CA INDEX NAME)

L91 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2002 ACS

AN 1997:743791 HCAPLUS

DN 128:55320

TI A disposable camera containing an antibacterial/antifungal agent

IN Iwagaki, Masaru

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03B017-02 ICS G03B017-04; G03C003-00; A01N037-44; A01N055-00; A01N059-16;

A01N059-26; A01N061-00

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 09297342 A2 19971118 JP 1996-114757 19960509 <--

A part or the entire main body of a camera contains an inorg. AB antibacterial and antifungal agent. More specifically the part or the entire main body of a photog. unit camera (so called, lens-bearing film unit) loaded with an unexposed film in the state of being ready for taking pictures is molded by a plastic contg. an inorg. antibacterial agent. Said inorg. antibacterial agent is a super-microparticulate inorg. antibacterial agent, specifically an antibacterial zeolite or glass and more specifically is selected from calcium silver phosphate, amino acid metal soups, calcium silver zinc phosphate, ceramic -silver, zirconium silver phosphate. In particular, said photog. unit camera is the lens-bearing film unit recovered after picture-taking, inspected, reloaded with an unexposed film ready for picture-taking, and reused by users. This disposable camera is markedly improved in antibacterial and antifungal property and is suitable for recycling the main body part from a photofinishing lab. and reusing it after loading with an unexposed film in a market, since it is not deteriorated by bacteria or fungi inside the main body part or on its surface and also in

the metal and electronic parts and does not affect photog. and phys. properties of an unexposed film.

ST disposable camera antibacterial antifungal agent; photog unit camera recycle reuse; lens bearing film unit recycle reuse; molded plastic main body part

IT Phosphate glasses

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); DEV (Device component use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(Ion pure; disposable camera contg. antibacterial-antifungal agent for recycle of main body part and reuse)

IT Glass, uses

### Zeolites (synthetic), uses

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); DEV (Device component use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(antibacterial and antifungal; disposable camera contg.

antibacterial-antifungal agent for recycle of main body part and reuse)

IT Ceramics

(contg. silver; disposable camera contg. antibacterial-antifungal agent for recycle of main body part and reuse)

IT Antibacterial agents

Cameras

### Fungicides

(disposable camera contg. antibacterial-antifungal agent for recycle of main body part and reuse)

IT Zeolites (synthetic), uses

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); DEV (Device component use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(disposable camera contg. antibacterial-antifungal agent for recycle of main body part and reuse)

IT Amino acids, uses

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); DEV (Device component use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(metal soups; disposable camera contg. antibacterial-antifungal agent for recycle of main body part and reuse)

IT 148-79-8, 2-(4-Thiazolyl)benzimidazole 7440-22-4D, Silver, compd. with calcium or zirconium phosphate or zinc-calcium phosphate, uses 7440-66-6D, Zinc, compd. with silver and calcium phosphate, uses 7779-90-0D, Zinc phosphate, compd. with calcium and silver 10103-46-5D, Calcium phosphate, compd. with silver 10103-46-5D, Calcium phosphate, compd. with silver and zinc 13108-52-6, 2,3,5,6-Tetrachloro-4-methylsulfonylpyridine 13765-95-2D, Zirconium phosphate, compd. with silver 26172-55-4, 5-Chloro-2-methyl-4-isothiazolin -3-one 153189-64-1, Novaron AG300

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); DEV (Device component use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(disposable camera contg. antibacterial-antifungal agent for recycle of main body part and reuse)

IT 26172-55-4, 5-Chloro-2-methyl-4-isothiazolin-3-one

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); DEV (Device component use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(disposable camera contg. antibacterial-antifungal agent for recycle of main body part and reuse)

RN 26172-55-4 HCAPLUS

CN 3(2H)-Isothiazolone, 5-chloro-2-methyl- (9CI) (CA INDEX NAME)

L91 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2002 ACS

AN 1997:609723 HCAPLUS

DN 127:301215

TI Magnetic recording medium containing bactericides without adverse effect on photographic properties

IN Iwagaki, Ken; Ozawa, Kimio

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 26 pp. CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03C007-00

ICS A01N059-16; B42D015-10; G03C001-00; G11B005-68

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 77

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 09230552 A2 19970905 JP 1996-39537 19960227 <--

AB Title medium contains inorg. bactericides in the recording layer or its adjacent layers (and also in the outermost photog. layers formed on the other side of support vs. the recording layer). The medium contains inorg. bactericides in the recording layer (and in the outermost layer) and org. bactericides in photog. layers.

ST magnetic recording medium bactericide contg; outermost photog layer bactericide contg; antibacterial **zeolite** contg magnetic

recording medium IT Glass, uses

RL: BAC (Biological activity or effector, except adverse); MOA (Modifier or additive use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(antibacterial, Ion Pure; magnetic recording medium contg. bactericides without adverse effect on photog. properties)

ÍT Ceramics

(antibacterial; magnetic recording medium contg. bactericides without adverse effect on photog. properties)

IT Antibacterial agents

Magnetic recording materials

Photographic films

(magnetic recording medium contg. bactericides without adverse effect on photog. properties)

IT Amino acids, uses

Soaps

RL: BAC (Biological activity or effector, except adverse); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(magnetic recording medium contg. bactericides without adverse effect on photog. properties)

IT Zeolites (synthetic), uses

RL: BAC (Biological activity or effector, except adverse); MOA (Modifier or additive use); TEM (Technical or engineered material use); BIOL

(Biological study); USES (Uses)

(magnetic recording medium contg. bactericides without adverse effect on photog. properties)

TT 7440-22-4D, Silver, compd. with phosphates 10103-46-5D, Calcium phosphate, compd. with silver 13765-95-2D, Zirconium phosphate, compd. with silver 23209-61-2D, Calcium zinc phosphate, compd. with silver RL: BAC (Biological activity or effector, except adverse); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses) (magnetic recording medium contg. bactericides without adverse effect on photog. properties)

IT 26172-55-4, 5-Chloro-2-methyl-4-isothiazolin-3-one

153189-64-1, Novaron AG 300

RL: BAC (Biological activity or effector, except adverse); MOA (Modifier or additive use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(magnetic recording medium contg. bactericides without adverse effect on photog. properties)

IT 26172-55-4, 5-Chloro-2-methyl-4-isothiazolin-3-one

RL: BAC (Biological activity or effector, except adverse); MOA (Modifier or additive use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(magnetic recording medium contg. bactericides without adverse effect on photog. properties)

RN 26172-55-4 HCAPLUS

CN 3(2H)-Isothiazolone, 5-chloro-2-methyl- (9CI) (CA INDEX NAME)

L91 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2002 ACS

AN 1997:587403 HCAPLUS

DN 127:279295

TI Antibacterial laminated sheets for outdoor use

IN Ochiai, Shinya; Nakagawa, Yoshihiro; Shimizu, Toshimi; Kuroda, Kenjiro

PA Toppan Printing Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B32B027-18

ICS A01N025-34; A01N059-16; B32B027-12; B32B027-32; B32B027-36

CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 10

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 09226068 A2 19970902 JP 1996-36567 19960223 <--

The sheets are obtained by applying antibacterial polymer layers and printing layers on different sides of substrate films, resp., followed by laminating polyolefin fabrics or expanded sheets on the films. Thus an antibacterial coating contg. a polyamide 10, nitrocellulose 10, PhMe 60, and Me2CHOH 20, and Ag-supporting zeolite (Ag content 2.5%) 0.2 parts was applied on a 25-.mu.m stretched polypropylene film and then the film is printed on the other side, laminated with a 300-.mu.m

expanded polyethylene sheet to give a laminated sheet with good antibacterial property.

ST antibacterial laminate sheet outdoor use; polyester polyolefin laminate sheet antibacterial coating

IT Zeolites (synthetic), uses

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); MOA (Modifier or additive use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(Ag, antibacterial agent; antibacterial laminated sheets for outdoor use)

IT Polyurethanes, uses

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(acrylic, antibacterial coating binder; antibacterial laminated sheets for outdoor use)

IT Polyamides, uses

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(antibacterial coating binder; antibacterial laminated sheets for outdoor use)

IT Laminated plastics, uses

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(antibacterial laminated sheets for outdoor use)

IT Coating materials

(bactericidal; antibacterial laminated sheets for outdoor use)

IT Acrylic polymers, uses

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(polyurethane-, antibacterial coating binder; antibacterial laminated sheets for outdoor use)

IT Silica gel, uses

RL: NUU (Other use, unclassified); USES (Uses)

(support for antibacterial agent; antibacterial laminated sheets for outdoor use)

IT 196600-58-5 196600-59-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); MOA (Modifier or additive use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(antibacterial agent; antibacterial laminated sheets for outdoor use)
T79-10-7DP, 2-Propenoic acid, urethane esters, polymers with methacrylates,
uses 3290-92-4DP, Trimethylolpropane trimethacrylate, polymers with
urethane acrylates

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(antibacterial coating binder; antibacterial laminated sheets for outdoor use)

IT 9004-70-0, Nitrocellulose

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(antibacterial coating binder; antibacterial laminated sheets for outdoor use)

IT 9002-88-4, Polyethylene

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); TEM (Technical or engineered material use); BIOL
(Biological study); USES (Uses)

(cellular or fabric; antibacterial laminated sheets for outdoor use)

IT 9003-07-0, Polypropylene

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(substrate sheet; antibacterial laminated sheets for outdoor use)

IT **26530-20-1**, 2-Octyl-4-isothiazolin-3-one

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); MOA (Modifier or additive use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses) (supported on silica gel, antibacterial agent; antibacterial

laminated sheets for outdoor use)

IT 26530-20-1, 2-Octyl-4-isothiazolin-3-one

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); MOA (Modifier or additive use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(supported on **silica** gel, antibacterial agent; antibacterial laminated sheets for outdoor use)

RN 26530-20-1 HCAPLUS

CN 3(2H)-Isothiazolone, 2-octyl- (9CI) (CA INDEX NAME)

L91 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2002 ACS

AN 1997:320957 HCAPLUS

DN 126:296070

TI Coated stainless steel or nickel alloy articles having high seawater resistance and their use in pipes

IN Amaya, Takashi; Ueda, Masakatsu

PA Sumitomo Metal Ind, Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B05D007-14

ICS A01N025-10; A01N025-34; A01N043-38; A01N043-80; A01N059-16; A01N059-20; B32B001-08; B32B015-08; B32B015-18; B32B027-18

CC 55-6 (Ferrous Metals and Alloys)
 Section cross-reference(s): 42, 56

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 09066263 A2 19970311 JP 1995-226131 19950904 <--

- AB The metal articles are **coated** with layers contg. antibacterial agents and are used in pipes. The pipes have long-term corrosion resistance in seawater without conventional cathode anticorrosion treatment.
- ST stainless steel antibacterial coating seawater resistance; nickel alloy antibacterial coating seawater resistance; pipe antibacterial coating seawater corrosion resistance
- IT Zeolites (synthetic), uses
  RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
  BIOL (Biological study); USES (Uses)

(Cu, antibacterial agent; stainless steel or Ni alloy articles coated with antibacterial layers for seawater resistance and their use in pipes)

IT Zeolites (synthetic), uses

RL: BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(Zn, antibacterial agent; stainless steel or Ni alloy articles coated with antibacterial layers for seawater resistance and their use in pipes)

IT Tannins

RL: BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(antibacterial agent; stainless steel or Ni alloy articles coated with antibacterial layers for seawater resistance and their use in pipes)

IT Coatings

(bactericidal; stainless steel or Ni alloy articles coated with antibacterial layers for seawater resistance and their use in pipes)

IT Anticorrosive coatings

Pipes (apparatus)

(stainless steel or Ni alloy articles coated with antibacterial layers for seawater resistance and their use in pipes)

IT Nickel alloy, base

RL: BUU (Biological use, unclassified); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses) (stainless steel or Ni alloy articles coated with

antibacterial layers for seawater resistance and their use in pipes) 719-96-0, N-(Fluorodichloromethylthio)phthalimide 1317-39-1, Cuprous oxide, uses 1613-17-8, Octadecyldimethylammonium chloride

26172-55-4

IΤ

RL: BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(antibacterial agent; stainless steel or Ni alloy articles coated with antibacterial layers for seawater resistance and their use in pipes)

IT 12597-68-1, Stainless steel, properties 189136-90-1 189136-91-2 189136-92-3 189136-93-4

RL: BUU (Biological use, unclassified); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses) (stainless steel or Ni alloy articles coated with

antibacterial layers for seawater resistance and their use in pipes)

IT 26172-55-4

RL: BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(antibacterial agent; stainless steel or Ni alloy articles coated with antibacterial layers for seawater resistance and their use in pipes)

RN 26172-55-4 HCAPLUS

CN 3(2H)-Isothiazolone, 5-chloro-2-methyl- (9CI) (CA INDEX NAME)

```
L91 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2002 ACS
    1997:140350 HCAPLUS
ΑN
    126:229685
DN
TI
    Method and means to bring about and maintain a microbiologically clean
    environment in rooms
    Rollen, Jarl-erik
IN
    Rollen; Jarl-Erik, Swed.
PΑ
    U.S., 3 pp. Cont. of U.S. Ser. No. 244,259, abandoned.
SO
    CODEN: USXXAM
DT
    Patent
LA
    English
TC
    ICM A61L002-16
    ICS A01N025-24; C09D005-00
NCL
    422028000
CC
     63-8 (Pharmaceuticals)
FAN.CNT 1
                                          APPLICATION NO. DATE
    PATENT NO.
                     KIND DATE
                     ----
                                          -----
     _____
    US 5603896
                     Α
                           19970218
                                          US 1996-647202
                                                           19960509 <--
PI
                           19911121 <---
PRAI SE 1991-3418
    US 1994-244259
                           19940520 <--
    A method for establishing and maintaining a microbiol. clean environment
AB
    in a room (e.g., labs., hospital rooms) consists in painting at least its
    wall and ceiling surfaces with a porous layer formed of a porous material,
    such as perlite, zeolite or micronized silicon
    dioxide optionally, mixed with with a fungicide or bactericide.
    An aq. liq. mixt. contg. a sanitizer, e.g., glutaraldehyde,
    chloromethylisothiazolinone is then spread over the porous layer,
    the water in the aq. liq. mixt. being evapd. between each application,
    leaving the sanitizer in the pores of the porous layer. The concn. of the
    sanitizers in water used is 150-500 \ \mathrm{ppm}.
    microbiol room sanitizing bactericide; mineral microbiol room sanitizing
ST
    bactericide
    Amides, biological studies
IT
    Sulfones
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (aryl; maintenance of microbiol. clean environment in rooms)
TΤ
    Air fresheners
      Antibacterial agents
      Fungicides
    Hospitals
    Laboratories
        (maintenance of microbiol. clean environment in rooms)
    Bentonite, biological studies
ΙT
    Fuller's earth
    Perlite
    Salts, biological studies
    Silicates, biological studies
       Zeolite-group minerals
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (maintenance of microbiol. clean environment in rooms)
ΙT
    Health
        (sanitation; maintenance of microbiol. clean environment in rooms)
    Aromatic compounds
IT
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (sulfones; maintenance of microbiol. clean environment in rooms)
    111-30-8, Glutaraldehyde
                              132-27-4, Sodium o-phenylphenate
                                                                  463-77-4D,
TΤ
    Carbamic acid, iodoalkyl or alkyne derivs. 1335-30-4, Aluminum silicate
     2634-33-5, 1,2-BenzIsothiazol-3(2H)-one
                                             7173-51-5
     7631-86-9, Silicon dioxide, biological studies
     9004-34-6D, Cellulose, compds.
                                     9005-25-8, Starch, biological studies
     13397-24-5, Gypsum, biological studies 14464-46-1, Cristobalite
     125794-71-0 137662-59-0, 3(2H)-Isothiazolone,
```

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chloromethyl
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (maintenance of microbiol. clean environment in rooms)
TΤ
    7631-86-9, Silicon dioxide, biological studies
    125794-71-0 137662-59-0, 3(2H)-Isothiazolone,
    chloromethyl
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (maintenance of microbiol. clean environment in rooms)
RN
    7631-86-9 HCAPLUS
CN
    Silica (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)
o = si = o
RN
    125794-71-0 HCAPLUS
    137662-59-0 HCAPLUS
RN
    ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2002 ACS
L91
ΑN
    1997:53812 HCAPLUS
DN
    126:75701
ΤI
    Bactericidal resin compositions
    Maeda, Mutsumi; Kimura, Yoshikazu; Shoda, Masahiro
ΙN
    Asahi Chemical Ind, Japan; Kanebo Kasei Kk
PA
SO
    Jpn. Kokai Tokkyo Koho, 6 pp.
    CODEN: JKXXAF
DT
    Patent
LA
    Japanese
    ICM C08L025-04
IC
         A01N025-10; A01N043-78; A01N059-16; A01N059-20; C08J005-00;
         C08J005-10; C08K003-08; C08K003-34; C08K003-36; C08K005-47;
          C08L051-04
CC
    37-6 (Plastics Manufacture and Processing)
FAN.CNT 1
    PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                     ----
                                          _____
                                                           _____
     ------
    JP 08295768 A2 19961112
                                          JP 1995-120431 19950424 <--
PI
AΒ
    Resin compns. esp. useful for air conditioner parts contain 100 parts
    styrene resins, 0.1-3 parts bactericidal metals supported on inorg.
    compds. having av. granular diam. 0.1-10 .mu.m, and 0.1-3 parts
    thiazolines supported on inorg. compds. having av. granular diam. 0.1-10
     .mu.m. Thus, a plate contained Styron 403R 100, Bactekiller BM 102G 0.5,
    and silica gel-supported 2-octyl-4-isothiazolin-3-one
    0.01 part.
    bactericidal polystyrene air conditioner part; Bactekiller bactericide
ST
    polystyrene compn; silica gel supported
    octylisothiazolinone; heat stabilizer bactericide polystyrene
TΤ
    Zeolites (synthetic), biological studies
    RL: ADV (Adverse effect, including toxicity); BUU (Biological use,
    unclassified); BIOL (Biological study); USES (Uses)
        (Bactekiller BM 102G; styrene resin compns. contg. supported
       bactericides and heat stabilizers for air conditioner parts)
TT
    Antibacterial agents
    Heat stabilizers
        (styrene resin compns. contq. supported bactericides and heat
        stabilizers for air conditioner parts)
ΙT
    Silica gel, uses
    RL: TEM (Technical or engineered material use); USES (Uses)
        (supports; styrene resin compns. contg. supported bactericides and heat
        stabilizers for air conditioner parts)
     148-79-8 26530-20-1
IT
     RL: MOA (Modifier or additive use); USES (Uses)
        (heat stabilizers; styrene resin compns. contg. supported bactericides
```

and heat stabilizers for air conditioner parts)

IT 142805-07-0, Styron 403R

RL: ADV (Adverse effect, including toxicity); BUU (Biological use, unclassified); DEV (Device component use); POF (Polymer in formulation); BIOL (Biological study); USES (Uses)

(styrene resin compns. contg. supported bactericides and heat stabilizers for air conditioner parts)

IT 26530-20-1

RL: MOA (Modifier or additive use); USES (Uses)

(heat stabilizers; styrene resin compns. contg. supported bactericides and heat stabilizers for air conditioner parts)

RN 26530-20-1 HCAPLUS

CN 3(2H)-Isothiazolone, 2-octyl- (9CI) (CA INDEX NAME)

L91 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2002 ACS

AN 1995:285651 HCAPLUS

DN 122:92758

TI Processing of heat-developable photographic material

IN Hirai, Hiroyuki

PA Fuji Photo Film Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp. CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03C008-40

ICS G03C001-498; G03F007-26

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 06230542 A2 19940819 JP 1993-16330 19930203 <-OS MARPAT 122:92758

GI

AB In developing a heat-developable photog. material comprising a support, photosensitive Ag halide, reducing agent, and binder, by heating in the presence of water, the water used is pretreated by contact with a substrate bearing adsorbed fungicide and bactericide. The fungicide/bactericide has the formula I [R1 = H, halo, alkyl, aryl, alkenyl, aralkyl, heterocyclyl, alkylamido, arylamido, alkylthioamido, alkylsulfonamido, arylsulfonamido; R2, R3 = H, halo, alkyl, aryl, CN, alkylthio, arylthio, alkylsulfoxy, alkylsulfonyl, heterocyclyl; R2, R3 may join to form an arom. ring]: Turbidity and foul-oder formation does not

arise even when a small amt. of water is recycled, and defect-free imaging can be achieved.

- ST heat developable photog processing bactericide; fungicide heat development photog
- IT Bactericides, Disinfectants, and Antiseptics

(for water used in photog. processing)

IT Photographic processing

(water treatment for)

IT Photothermographic copying

(water treatment for processing of material for)

IT Zeolites, uses

RL: TEM (Technical or engineered material use); USES (Uses) (X, Linde ZB 300; bactericide carrier for water treatment)

IT 7440-44-0, Carbon, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(activated; bactericide carrier for water treatment)

IT 68518-42-3, Diaion WK-10 111744-65-1, SP 800

RL: TEM (Technical or engineered material use); USES (Uses)

(bactericide carrier for water treatment)

IT 95-14-7, 1H-Benzotriazole 2634-33-5, 1,2-Benzisothiazol

-3(2H)-one **2682-20-4** 4337-43-3 **26172-55-4** 

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(fungicide/bactericide; photog. material development using water treated by)

IT 2682-20-4 26172-55-4

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(fungicide/bactericide; photog. material development using water treated by)

RN 2682-20-4 HCAPLUS

CN 3(2H)-Isothiazolone, 2-methyl- (9CI) (CA INDEX NAME)

RN 26172-55-4 HCAPLUS

CN 3(2H)-Isothiazolone, 5-chloro-2-methyl- (9CI) (CA INDEX NAME)

=> fil wpix

FILE 'WPIX' ENTERED AT 09:37:39 ON 11 JUN 2002

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FILE LAST UPDATED: 10 JUN 2002

## levy - 09 / 763916

MOST RECENT DERWENT UPDATE 200236 <200236/DW>
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- >>> The BATCH option for structure searches has been
  enabled in WPINDEX/WPIDS and WPIX >>>
- >>> PATENT IMAGES AVAILABLE FOR PRINT AND DISPLAY >>>
- >>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES,
  SEE http://www.derwent.com/dwpi/updates/dwpicov/index.html <<<
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  GUIDES, PLEASE VISIT:
  http://www.derwent.com/userguides/dwpi guide.html <<</pre>
- => d all abeq tech tot 1126

L126 ANSWER 1 OF 4 WPIX (C) 2002 THOMSON DERWENT

AN 2000-256467 [22] WPIX

DNC C2000-078191

- TI Particulate composition comprises porous inorganic carrier particles having biocide adsorbed within the pore system, useful in surface cleaning and surface coating compositions e.g. paints, lacquers and plastisols.
- DC A60 C02 D22 D25 E13 G02 H01
- IN ALDCROFT, D; EDGE, M; JONES, H; ROBINSON, J; SEAL, K; TURNER, D
- PA (CROS-N) CROSFIELD LTD; (INEO-N) INEOS SILICAS LTD

CYC 87

- PI WO 2000011949 A1 20000309 (200022)\* EN 35p A01N025-08 <-RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
  - OA PT SD SE SL SZ UG ZW
    W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB
    GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU
    LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR

TT UA UG US UZ VN YU ZA ZW
AU 9954383 A 20000321 (200031) A01N025-08 <-BR 9913260 A 20010522 (200132) A01N025-08 <-EP 1115282 A1 20010718 (200142) EN A01N025-08 <--

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

CN 1325265 A 20011205 (200223) A01N025-08 <--

ADT WO 2000011949 A1 WO 1999-GB2796 19990824; AU 9954383 A AU 1999-54383 19990824; BR 9913260 A BR 1999-13260 19990824, WO 1999-GB2796 19990824; EP 1115282 A1 EP 1999-940403 19990824, WO 1999-GB2796 19990824; CN 1325265 A CN 1999-812765 19990824

FDT AU 9954383 A Based on WO 200011949; BR 9913260 A Based on WO 200011949; EP 1115282 A1 Based on WO 200011949

PRAI GB 1998-18778 19980828

IC ICM A01N025-08

ICS **C09D005-14** 

AB WO 200011949 A UPAB: 20000508

NOVELTY - A particulate composition of matter comprises porous inorganic carrier particles having biocide adsorbed within the pore system and having a retention factor of at least 0.6.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (a) a liquid-based medium incorporating the particulate composition;
- (b) a surface coating formulation incorporating the particulate composition;
- (c) a surface cleaning formulation incorporating the particulate composition;

- (d) a sealant formulation incorporating the particulate composition;
- (e) a tiling, grouting or cement-based formulation incorporating the particulate composition;
- (f) a mud drilling formulation incorporating the particulate composition; and
- (g) a method of producing a biocidally-protected formulation comprising one or more components and a biocide, where the biocide (preferably an **isothiazolone** and/or its derivatives) is introduced into the formulation by means of a particulate composition as above.

USE - The particulate composition may be used in surface cleaning and surface coating compositions e.g. paints, lacquers and plastisols and in oil drilling fluids, to give a controlled release of the biocide to inhibit the growth and/or to destroy biological and/or microbiological species e.g. bacteria, fungi and algae.

ADVANTAGE - The particles retain the biocide within the pore system and to such an extent that the release of the biocide into the liquid media is sufficiently retarded to provide an extended period of biocidal activity.

In an examination of the effect of biocide loaded carriers in an acrylic paint on the inhibition of Cladesporium cladosporioides, OIT adsorbed at 4000 ppm on dealuminated Y-zeolite SD 2209 (SD 2209/OIT) gave a zone of inhibition of greater than 42 before and after leaching. Corresponding values for free OIT was greater than 42 before leaching and 1 after leaching.

FS CPI

12 CPI

FA AB; DCN

MC CPI: A08-M02; A12-B01; C04-D02; C05-B02C; C07-F01; C12-M10A; C12-M1D; C14-A01; C14-A04; C14-A05; D09-A01C; D11-B14;

E07-F01; G02-A03B; G02-A05G; H01-B06

TECH

UPTX: 20000508

TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Composition: The composition has a retention factor of at least 0.8. Preferred Particles: The particles carry at least 30% of biocide solution and have an activated micropore system. The particles have a pore area of at least 25 m2/g in the pore size of 20-50Angstrom. The particles have BET surface area of at least 200 (preferably at least 300) m2/g. The particles have a biocide adsorption capacity of at least 10 wt.%. The particles comprise amorphous silicas, Y-zeolites or dealuminated Y-zeolites or their mixtures.

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Surface Coating: The surface coating formulation is in the form of a paint or lacquer, and is especially a water-based or organic solvent-based paint. Preferred Method: The particles used reduce degradation of the biocide to such an extent that at least 60 (preferably at least 70, especially at least 80)% of the biocide is detectable when the biocide-containing particles are subjected to UV exposure and/or thermal aging for 40 days.

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L126 ANSWER 2 OF 4 WPIX (C) 2002 THOMSON DERWENT
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AN 1997-038074 [04] WPIX

DNC C1997-012021

TI Antibactericidal resin composites - comprises polymer component contg. styrene units, inorganic cpds. contg. antibactericidal metal powder, and inorganic cpds. contg. thiazoline-contg. organic cpds.

DC A13 A60 D22 E13

PA (ASAH) ASAHI KASEI KOGYO KK; (KANE-N) KANEBO KASEI KK

CYC I

PI JP 08295768 A 19961112 (199704)\* 6p C08L025-04

ADT JP 08295768 A JP 1995-120431 19950424

PRAI JP 1995-120431 19950424

IC ICM C08L025-04

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ICS A01N025-10; A01N043-78; A01N059-16; A01N059-20; C08J005-00;
          C08J005-10; C08K003-08; C08K003-34; C08K003-36; C08K005-47;
          C08L051-04
AB
     JΡ
         08295768 A UPAB: 19970122
     Thermoplastic resin composites are claimed, comprising (A) 100 pts. wt. of
     polymer component contg. styrene units, (B) 0.1-3.0 pts. wt. of inorganic
     cpds. contg. antibactericidal metal powder in 0.1-10 mum of mean grain
     size as immobilised and (C) 0.1-3.0 pts. wt. of inorganic cpds. contg.
     thiazoline-contg. organic cpds. in 0.1-10 mum of mean grain size.
          Pref. (B) is zeolite, and (C) is silica gel, and (A) is
     polystyrene polymer opt. reinforced by rubber. The metal powder is Cu, Ag,
     Zn or Ni. Thiazoline cpds. are 2-n-octyl-4-isothiazolin-3-one,
     or 2-(4'-thiazoyl)-benzimidazole.
          USE - The thermoplastic antibactericidal resin composites are used as
     parts of electric devices (e.g. panel grill, or frame of air conditioners)
     (claimed), or bath or kitchen counters.
     Dwg.0/0
    CPÍ
FS
FA
     AB; DCN
     CPI: A08-M02; D09-B; E06-D05; E07-F01
MC
L126 ANSWER 3 OF 4 WPIX (C) 2002 THOMSON DERWENT
     1989-314796 [43]
                        WPIX
ΑN
DNN
    N1989-239660
                        DNC C1989-139480
     Plywood adhesive compsn. - contg. inorganic particles, absorbed phytoncide
TΤ
     liq. and mildew-proofing agent.
DC
     C03 D22 F09 G03 P63
     (MATW) MATSUSHITA ELECTRIC WORKS LTD
PΑ
CYC
PΙ
     JP 01234481
                 A 19890919 (198943)*
                                               Зр
ADT
     JP 01234481 A JP 1988-61528 19880315
PRAI JP 1988-61528
                      19880315
     B27D001-04; B27K003-52; C09J003-00
TC
AΒ
     JP 01234481 A UPAB: 19930923
     Plywood adhesive compsn. contains inorganic particles, in which phytoncide
     liq. was absorbed and pref. mildew proofing agent. Plywood made by bonding
     veneers with above adhesive compsn. is also claimed.
          Pref. phytoncide liqs. are essential oils, e.g. Japanese cypress-,
     Japanese cedar-, camphor-, terpene-, and pine-oil and their components,
     e.g. alpha- or beta-pinene, dipentene, epsilon-limonene, terpinolene,
     linalool, terpineol, camphor, and borneol. Adhesive compsn. may be any
     adhesives for wood. inorganic particle is selected from porous inorganic
     particles, e.g. pearlite and zeolite. Pref. concn. is 10-50
     wt.%. Mildew proofing agent is selected from 1:2-benzisothiazoline
     -3-on-, benzimidazole-, cyclic amine-, and N-contg. heterocyclic-type
     cpds. Pref. concn. is 0.5-2.5 wt.%.
          USE/ADVANTAGE - Used for making plywood for interior use, e.g.
     ceiling and wall. Terpene cpds. in phytocide liq. are emitted continuously
     for long period. So rooms have similar atmos. as forest bathing to give
     remedial results and deodorising effects.
     0/0
     CPI GMPI
FS
FA
     AB; DCN
     CPI: C04-B01C1; C04-D02; C06-D05; C06-F01; C10-E04; C10-F02; C10-J02;
MC
          C12-A02C; D09-A01; D10-A06; E06-D05; E06-F01; E10-E04J; E10-E04M1;
          E10-F02A; E10-J02A; E31-P02B; F05-B; F05-B01; G03-B01; G03-B02;
          G03-B03
L126 ANSWER 4 OF 4 WPIX (C) 2002 THOMSON DERWENT
AN
     1984-109128 [18]
                        WPIX
DNC
     C1984-046091
     Solid microbiocidal compsn. - with up to 70 per cent microbiocide and
ŢΙ
     finely divided water-insol. solid carrier.
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D21 D22 E13 H01
DC
     BURKE, J D; RICHMOND, R C
IN
PΑ
     (ROHM) ROHM & HAAS CO
CYC
     13
                   A 19840425 (198418) * EN
PΙ
     EP 106562
                                               20p
         R: AT BE CH DE FR GB IT LU NL SE
                   A 19840329 (198420)
     AU 8319503
     JP 59078109
                   Α
                      19840504 (198424)
                   A 19840904 (198443)
     BR 8304987
     EP 106562 A EP 1983-305577 19830921; JP 59078109 A JP 1983-176180 19830922
ADT
PRAI US 1982-422498
                      19820923
     GB 2087388; US 3517022; US 4105431; US 4241214; US 4292430
     A01N025-32; A01N043-80; C02F001-50; C02F003-34; C09K007-00
IC
AB
     EP
           106562 A UPAB: 19930925
     Flowable non-dusting particulate solid microbiocidal compsn. comprises
     0.1-70 wt.% of water-soluble microbiocidal cpd. (I) and 99.9-30 wt.% of
     finely divided water insoluble solid carrier (II).
          Compsn. is useful in aq. systems, esp. oil well field water, oil well
     drilling mud, clay mining dispersant systems and cosmetic compsns. (I) is
     esp. an isothiazolone, and these compsns. are safer for
     transporting, handling and use, and they are flowable stable and
     non-irritating to humans before the active (I) is leached on to the skin.
     0/0
FS
     CPI
FA
     AB
     CPI: D04-A02; D08-B; D09-A01C; E07-F01; H01-B06
MC
=> d his
     (FILE 'HCAPLUS' ENTERED AT 08:09:51 ON 11 JUN 2002)
                DEL HIS
                E GB98-18778/AP, PRN
L1
              1 S E4
                E W099-GB2796/AP, PRN
L2
              1 S E3, E4
              1 S L1, L2
L3
                E CROSFIELD/PA, CS
            227 S E3-E60
L4
                E ALDCROFT D/AU
L5
             46 S E3-E5
                E JONES H/AU
           1282 S E3-E70
L6
                E JONES HELEN/AU
L7
             65 S E3-E14
                E HELEN J/AU
                E DAFYDD T/AU
                E TURNER D/AU
            712 S E3-E27
L8
                E EDGE M/AU
            202 S E3-E5, E12-E16
L9
                E ROBINSON J/AU
           1815 S E3-E66
L10
                E ROBINSON JULIE/AU
             25 S E3-E9
L11
                E SEAL K/AU
             46 S E3-E7, E9-E12
L12
           5707 S ?ISOTHIAZOL?
L13
              6 S L13 AND L4-L12
L14
     FILE 'REGISTRY' ENTERED AT 08:16:43 ON 11 JUN 2002
              3 S 26530-20-1 OR 2682-20-4 OR 26172-55-4
L15
```

460 S (26530-20-1 OR 2682-20-4 OR 26172-55-4)/CRN

L16

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1758 S 16.171.7/RID
L17
L18
           1295 S L17 NOT L15, L16
     FILE 'HCAPLUS' ENTERED AT 08:18:16 ON 11 JUN 2002
L19
           1003 S L15
            248 S KATHON CG
L20
            459 S KATHON
L21
L22
            621 S L16
L23
            730 S L18
L24
           6395 S L13,L19-L23
     FILE 'REGISTRY' ENTERED AT 08:20:57 ON 11 JUN 2002
L25
              1 S 1003-07-2
     FILE 'HCAPLUS' ENTERED AT 08:21:07 ON 11 JUN 2002
L26
            276 S L25
           6403 S L24, L26
L27
              6 S L4-L12 AND L27
L28
L29
              6 S L14, L28
              5 S L29 NOT EMPHYSEMA
L30
             25 S L27 AND ?ZEOLIT?
L31
             82 S L27 AND SILICA
L32
L33
             26 S L27 AND (SIO2 OR SILICON() (DIOXIDE OR OXIDE))
L34
            115 S L31-L33
     FILE 'REGISTRY' ENTERED AT 08:23:56 ON 11 JUN 2002
              1 S SILICA/CN
L35
     FILE 'HCAPLUS' ENTERED AT 08:24:06 ON 11 JUN 2002
L36
             44 S L27 AND L35
            119 S L34, L36
L37
              4 S L30 AND L37
L38
L39
              5 S L30, L38
                E ZEOLITE/CT
                E·E177+ALL
L40
          47893 S E1
                E E2+ALL
           8253 S E209+NT
T.41
          52071 S E7+NT
L42
             23 S L27 AND L40-L42
L43
                E E434+ALL
              2 S E4 AND L27
L44
              2 S E4+NT AND L27
L45
                E E16+ALL
L46
               3 S L27 AND E3+NT
                E E2+ALL
              2 S L27 AND E8+NT
L47
L48
              5 S L27 AND E2+NT
            123 S L37, L43-L48
L49
               4 S L4-L12 AND L49
L50
                E ADSORPTION/CT
                E E3+ALL
                E E4+ALL
              9 S E5, E4+NT AND L27
L51
            130 S L49, L51
L52
L53
               4 S L4-L12 AND L52
               5 S L39, L53
L54
                 E BIOCIDE/CT
                E E4+ALL
         248259 S E2+NT
L55
           8427 S ?BIOCID?
L56
           1007 S L55, L56 AND L40-L42
L57
           5636 S L55, L56 AND (?ZEOLIT? OR SILICA OR SIO2 OR SILICON() (DIOXIDE
L58
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5636 S L57, L58
L59
            101 S L52, L59 AND PAINT
L60
L61
            879 S L52, L59 AND COAT?
L62
             11 S L52, L59 AND (LACQUER? OR LAQUER?)
L63
            306 S L52, L59 AND (SEALANT OR TILE OR TILING OR GROUT OR GROUTING O
L64
            117 S L60-L63 AND (?PORE? OR ?POROUS? OR ?POROS?)
L65
           2943 S L52, L59 AND (COAT? OR CEMENT? OR AGRO?)/SC, SX
L66
            241 S L65 AND (?PORE? OR ?POROUS? OR ?POROS?)
L67
            224 S L64, L66 AND (PY<=1998 OR PRY<=1998 OR AY<=1998)
              7 S L67 AND L27
L68
L69
            300 S L52, L59 AND L27
L70
            249 S L69 AND (PY<=1998 OR PRY<=1998 OR AY<=1998)
            136 S L70 AND L60-L65
L71
             73 S 5/SC AND L71
L72
L73
             24 S 5/SX AND L71
             97 S L72, L73
L74
              6 S L74 AND L40-L42
L75
              6 S L74 AND ?ZEOLIT?
L76
            15 S L54, L68, L75, L76
L77
L78
             88 S L74 NOT L77
L79
             1 S L78 AND GRANUL?
             16 S L77, L79
L80
              3 S L27 AND Y(L)ZEOLIT?
L81
L82
              1 S L27 AND DEALUMIN? (L) ZEOLIT?
             17 S L80-L82
L83
                SEL HIT RN
     FILE 'REGISTRY' ENTERED AT 08:51:24 ON 11 JUN 2002
             11 S E1-E13
L84
              8 S L84 AND L15-L18, L25
L85
L86
              1 S L84 AND L35
L87
              2 S L84 NOT L85, L86
     FILE 'REGISTRY' ENTERED AT 08:52:28 ON 11 JUN 2002
     FILE 'HCAPLUS' ENTERED AT 08:52:56 ON 11 JUN 2002
L88
             17 S L19 AND ?ZEOLIT?
L89
             15 S L19 AND L40-L42
              9 S L88, L89 NOT L83
L90
              9 S L90 AND L1-L14, L19-L24, L26-L34, L36-L83, L88-L90
L91
     FILE 'WPIX' ENTERED AT 08:57:17 ON 11 JUN 2002
                E WO99-GB2796/AP, PRN
L92
              1 S E3
                E GB98-18778/AP, PRN
              1 S E4
L93
L94
              1 S L92, L93
           1805 S A01N025-08/IC, ICM, ICS
L95
L96
             62 S L95 AND C09D005/IC, ICM, ICS
                E R7987+ALL/DCN
                E R07987+ALL/DCN
            111 S E1
L97
                E R12421+ALL/DCN
L98
             43 S E3
                E R08266+ALL/DCN
            137 S E1
L99
                E R08264+ALL/DCN
            169 S E1
L100
                E R16657+ALL/DCN
L101
             60 S E3
                E R01694+ALL/DCN
          61528 S E1 OR 1694/DRN
L102
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5726 S F720/M0, M1, M2, M3, M4, M5, M6

L103

L104	7425	S	L97-L101,L103 OR ?ISOTHIAZOL? OR ISO THIAZOL?
L105	12	S	L104 AND ?ZEOLIT?
L106	2	S	L105 AND L95
L107	3	S	L105 AND C09D/IC, ICM, ICS
L108	4	S	L94, L106, L107
L109	3	S	L108 NOT DNA/TI
L110	8	S	L105 NOT L108
L111	476	S	L104 AND (A12-B01 OR G02-A? OR H01-B06?)/MC
L112	2	S	L111 AND L105
L113	1	S	L109 AND L112
L114	3	S	L109, L113
L115			(R032 OR R034)/M0,M1,M2,M3,M4,M5,M6 AND L104
L116			(B12-M11D OR C12-M11D)/MC AND L104
L117	3	S	L115,L116 AND L105
L118	5	S	L114, L117
L119	79	S	L115,L116 NOT L105-L110,L112-L114,L117,L118
L120	7	S	L97-L101 AND L119
L121	33	S	?ISOTHIAZOL? AND L119
L122	2	S	ISO THIAZOL? AND L119
L123	35	S	L120-L122
		SE	EL DN AN 27
		SE	EL DN AN 27 L123
L124	1	S	E3-E4 AND L123
L125			L118,L124 AND L92-L124
L126	4	S	L125 NOT (SANITATION OR TOXICITY)/TI

FILE 'WPIX' ENTERED AT 09:37:39 ON 11 JUN 2002